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POLIOMYELITIS IN THE UNITED STATES

In June, 1927, reports from California showed more than the usual seasonal rise in the number of cases of poliomyelitis. Early in July a number of cases of this disease were reported in New Mexico. Later, other States reported local epidemics or a general increased prevalence of the disease. Illinois, Ohio, Massachusetts, Pennsylvania, and New York City are among the other localities most affected.

A comparison of the weekly telegraphic reports from States for the 10 weeks ended September 10, 1927, with the corresponding reports for the years 1925 and 1926 shows that the total number of cases reported for the period in 1927 was almost the same as the number for the corresponding period in 1925, but the figures were nearly three times those for the same period of 1926. Reports for the week ended September 17, 1927, however, show about five times as many cases as for the corresponding period of 1926 and somewhat more than twice as many as in 1925. The following are among the States reporting an increase in the number of cases for the week ended September 24, 1927: Illinois, Kansas, Maine, Michigan, Missouri, and Texas. Among the States showing a decrease in the number of cases for the week are California, Connecticut, New Jersey, New York, and Pennsylvania. The telegraphic reports from States for the week ended September 24 will be found on page 2402.

A STUDY OF THE PELLAGRA-PREVENTIVE ACTION OF THE COWPEA (VIGNA SINENSIS) AND OF COMMERCIAL WHEAT GERM

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In the present communication we desire to report the results of a study of pellagra prevention with cowpeas and with commercial wheat germ. This study was carried out, as were our previous studies of single foods (1) (2) (3), at the Georgia State Sanitarium, to the trustees, superintendent, officers, and staff of which we have become increasingly indebted for the valuable cooperation which has been extended us now for a period of over 10 years.

COWPEAS

Early in the course of our study of pellagra, one of us (J. G.) was led to interpret certain epidemiological observations as indicative of the value of the legumes as pellagra preventives. In 1918 and 1919, utilizing the exceptionally favorable clinical opportunities for the study of the prevention of pellagra afforded by the Georgia State Sanitarium, Goldberger and Tanner (1) carried out some tests of soy beans and of cowpeas (*Vigna sinensis*) the results of which appeared to indicate that these legumes possessed little, if any, pellagra-preventive value.

The results of some of our more recent studies (2) (3) (4) have led us provisionally to conclude that all foods known to contain the so-called vitamin B[1] contain the pellagra-preventing factor P–P. This conclusion would seem to be negatived by the results of the above-mentioned pellagra-preventive tests of soy beans and cowpeas, since dried legumes are generally considered to be good sources of vitamin B. In considering this apparent inconsistency in the light of some of our more recent experiences, notably with the tomato (3), it seemed to us probable that the preventive failure of the soy bean and of the cowpea was due to the use of insufficient quantities, even though the quantities actually used were quite liberal. This and the importance of the dried legumes as food made it seem worth while to study the pellagra-preventive potency of at least one of them again. Accordingly, we began such a study about the middle of July, 1926, the results of which we now desire to report.

In this study we used the cowpea, the variety known as the California black-eyed pea. We did so principally because we had worked with it in the study above referred to, and because it is very commonly used as a food by the rural population of our Southern States, among whom pellagra is endemic.

In the study carried out during 1919 (1) the daily ration of cowpeas was 200 grams (7 ounces). In that test the cowpeas were administered in the form of a purée and were the only known possible source of the pellagra-preventing factor in the diet, with the exception of such, probably entirely negligible, amount as may have been present in the daily ration of 4 grams of lemon juice.

In the present instance we planned to give our patients the cowpea ration as a part of a more conventionally constituted diet and with as little disarrangement of the latter as possible, especially with respect to such of the other components as might possibly contain the P–P factor. To accomplish this we deemed it impracticable to add more than 150 grams (5 ounces) of cowpeas to the basic diet. This is much less than was given in the original study. We thought, however, that some such reduction might be made to compensate for the P–P that might already be present in the corn meal, flour,

[1] In the present communication the term "vitamin B" or "water-soluble B" is used to designate the mixture of substances with antineuritic and growth-promoting properties.

cowpeas, and rice, and that was known to be in the tomato juice (3) of the diet to which the cowpeas were now to be added and still keep the level of P–P in the diet thus constituted at or, it was hoped, even raise it above, that of the cowpea purée supplied in 1919. As thus constituted the composition of the diet is shown in Tables 1 and 2.

TABLE 1.—*Approximate composition* [1] *of a cowpea-supplemented diet offered daily to each of a group of colored insane female pellagrins during the period July 15, 1926, to February 28, 1927*

(Total calories, 2,184)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Corn meal [2]	200	16.8	9.4	148.0
Wheat flour	76	8.7	.8	57.1
Cowpeas (*Vigna sinensis*) [3]	28	6.0	.4	17.0
Rice	14	1.1	----	11.1
Lard	42	----	42.0	----
Tomato juice [4]	130	----	----	----
SUPPLEMENTAL				
Cowpeas (*Vigna sinensis*) [3]	150	32.1	2.1	91.2
Cod-liver oil	15	----	15.0	----
Calcium carbonate	3	----	----	----
Sirup iodide of iron (U. S. P.) (2 drops).				
Dilute hydrochloric acid (U. S. P.) (90 drops).				
Total nutrients	----	64.7	69.7	324.4
Nutrients per 1,000 calories	----	29.5	31.7	148.0

[1] Factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1905.
[2] Whole maize meal, sifted in kitchen and made into corn bread and "mush."
[3] The variety known as the California black-eyed pea. Ground into a coarse meal and boiled.
[4] Pressed through a cloth from canned tomatoes.

TABLE 2.—*Approximate composition* [1] *of a cowpea-supplemented diet offered daily to each of a group of colored insane female pellagrins during the period February 28 to July 15, 1927*

(Total calories, 2,174)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Corn meal [2]	270	22.7	12.7	199.8
Wheat flour	14	1.6	.1	10.5
Cowpeas (*Vigna sinensis*) [3]	28	6.0	.4	17.0
Lard	42	----	42.0	----
Tomato juice [4]	130	----	----	----
SUPPLEMENTAL				
Cowpeas (*Vigna sinensis*) [3]	150	32.1	2.1	91.2
Cod-liver oil	15	----	15.0	----
Calcium carbonate	3	----	----	----
Sirup iodide of iron (U. S. P.) (2 drops).				
Dilute hydrochloric acid (U. S. P.) (90 drops).				
Total nutrients	----	62.4	72.3	318.5
Nutrients per 1,000 calories	----	28.7	33.3	146.8

[1] Factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1905.
[2] Whole maize meal sifted in the kitchen and made into corn bread and "mush."
[3] The variety known as the California black-eyed pea.
[4] Pressed through a cloth from canned tomatoes.

A total of 22 colored insane patients came under observation for pellagra prevention with the cowpea diet. One of these patients died of an intercurrent condition at the end of about five months; the others continued under observation for one year or until evidence of active pellagra developed requiring other treatment. During this period 2 of the 21 patients developed definite recurrences. In one of these the dermatitis made its first appearance about April 17, 1927, and in the other about April 25, 1927, or in both at the end of about nine months of the cowpea treatment. A third patient developed a mild stomatitis, with no dermal lesions, during April, 1927, which, however, subsided spontaneously without interfering with her food taking. Her appetite was excellent throughout to the end of the period (one year) of observation. The patients presenting the dermal recurrences had also had good appetites throughout and had consumed virtually all of the cowpeas offered.

It is clear that 150 grams of cowpeas (in conjunction with the other components of the diet) were insufficient to prevent completely the recurrence of pellagra. It must be noted, however, that the interval (nine months) before the development of the recurrences was considerably longer than has ordinarily been the case in our experience. Furthermore, the development of but two or certainly not more than three cases in a group of 21 patients during a period of one year is decidedly less than we should ordinarily expect. Our experience with this class of patients has led us to expect a recurrence rate of fully 40 to 50 per cent within three to seven or eight months in the absence of an adequate preventive. The long interval (nine months) before the recurrence and the relatively low recurrence rate (15 per cent) would therefore seem to indicate that the cowpea-supplemented diet had had a decidedly beneficial, even though not a fully preventive, effect. We may conclude, therefore, that the pellagra-preventing factor (P–P) is present in the cowpea, but in a relatively small amount.

Discussion.—The result of the study outlined in the foregoing would seem to differ appreciably from that of the study carried out in 1919. In the present study evidence of a preventive effect is recognizable, whereas in the study of 1919 no preventive effect could be vouched for. This difference in results may be explained, however, by the difference in the character of the test diets to which reference has already been made. In the 1919 study 200 grams of cowpeas supplied virtually all of the pellagra preventive present in the diet, whereas in the present study the cowpeas (178 grams in all) were combined with other foods, some of which (tomatoes) certainly, and others (corn meal, etc.) very probably, contained more or less of the pellagra preventive. There is, of course, no basis for definitely

deciding (other than the physiological reaction) how the total amount of pellagra preventive (P–P) yielded by these combined sources compares with that yielded by the 200 grams of cowpeas alone. Notwithstanding this, however, it seems to us quite probable that the 200 grams of corn meal and 130 grams of tomato juice (not counting the wheat flour and rice—highly milled products) more than compensate for the difference in P–P content represented by 22 grams of cowpeas and 4 grams of lemon juice. Viewed thus, it seems quite probable that the P–P content of the diet in the present study exceeded that of the 1919 study and satisfactorily explains the difference in the results under consideration.

In our earlier studies of single foods we had in mind primarily the effectiveness of the food studied as a practical preventive when given in what would be conventionally considered a "liberal" allowance. If complete protection was not afforded, we were disposed to interpret this as indicating a complete lack of preventive action. Our more recent studies have impressed us with the vital importance of the quantitative factor. The result of the present study adds emphasis to this and clearly indicates not only that the pellagra-preventive failure of the soy bean in the 1919 study is in itself inconclusive but makes it probable that this bean actually does possess pellagra-preventive potency, even if, as in the case of the cowpea, of a relatively low order.

WHEAT GERM

In the course of our study of black tongue of dogs we were led to test the preventive potency of wheat, and thus we found that this cereal, particularly the germ, contains the black-tongue-preventing factor (5). Since we had provisionally concluded that black tongue of dogs is the analogue of pellagra in man (2), the favorable indications afforded by the study of wheat germ in the canine disease at once suggested the desirability of studying its preventive action in human pellagra. We have carried out such a study, the results of which we now wish to report.

This study was begun July 20, 1926, virtually at the same time as was that of cowpeas. The wheat germ was a commercial product secured from a large flour mill in five successive batches during the progress of the study. The allowance decided upon was 150 grams per patient per day, or the same as that of cowpeas in the study of that legume. The wheat germ was boiled with a portion of the other cereals of the diet, and a third of the daily allowance was served as a part of each of the three daily meals. The composition of the wheat-germ-supplemented diet is shown in Tables 3 and 4.

TABLE 3.—*Approximate composition*[1] *of a wheat-germ-supplemented diet offered daily to each of a group of white insane female pellagrins during the period July 20, 1926, to January 12, 1927*

(Total calories, 2,093)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Corn meal[2]	200	16.8	9.4	148.0
Wheat flour	62	7.1	.6	46.6
Cowpeas[3]	28	6.0	.4	17.0
Rice	14	1.1		11.1
Lard	31		31.0	
Tomato juice[4]	130			
SUPPLEMENTAL				
Wheat germ[5]	150	35.9	14.1	77.3
Cod-liver oil	14		14.0	
Calcium carbonate	3			
Sirup iodide of iron (U. S. P.) (2 drops)				
Dilute hydrochloric acid (U. S. P.) (90 drops)				
Total nutrients		66.9	69.5	300.0
Nutrients per 1,000 calories		31.9	33.1	142.9

[1] Except for wheat germ, factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1906.
[2] Whole maize meal, sifted in kitchen and made into corn bread and "mush."
[3] The variety known as the California black-eyed pea.
[4] Pressed through a cloth from canned tomatoes.
[5] Commercial wheat germ. Average of analyses of 5 samples made in division of chemistry of Hygienic Laboratory: Moisture, 10.9; protein (N×5.7), 23.9; fat, 9.4; ash 4.3; carbohydrate (by diff.). 51 5

TABLE 4.—*Approximate composition*[1] *of a wheat germ-supplemented diet offered daily to each of a group of white insane female pellagrins during the period January 12, 1927, to July 20, 1927*

(Total calories, 2,242)

Diet		Nutrients		
Articles of diet	Quantity	Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Corn meal[2]	200	16.8	9.4	148.0
Grits (granular corn meal)	28	2.6	.5	21.1
Wheat flour	62	7.1	.6	46.6
Cowpeas[3]	28	6.0	.4	17.0
Rice	28	2.2	.1	22.1
Lard	31		31.0	
Tomato juice[4]	130			
SUPPLEMENTAL				
Wheat germ[5]	150	35.9	14.1	77.3
Cod-liver oil	14		14	
Calcium carbonate	3			
Sirup iodide of iron (U. S. P.) (2 drops)				
Dilute hydrochloric acid (U. S. P.) (90 drops)				
Total nutrients		70.6	70.1	332.1
Nutrients per 1,000 calories		31.5	31.3	148.2

[1] Except for wheat germ, factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bull. 28, 1906.
[2] Whole maize meal, sifted in kitchen and made into corn bread and "mush."
[3] The variety known as the California black-eyed pea.
[4] Pressed through a cloth from canned tomatoes.
[5] Commercial wheat germ. Average of analyses of 5 samples made in division of chemistry of Hygienic Laboratory: Moisture, 10.9; protein (N×5 7), 23.9; fat, 9.4; ash, 4.3; carbohydrate (by diff.), 51.5.

A total of 34 white female insane patients came under observation for pellagra-preventive treatment with this diet. Of this group, 6 patients were under observation for periods too brief to justify their consideration in the present connection. One was under continuous observation for a year, but her treatment was suspended during a period of two and one-half months because of an intercurrent pulmonary condition requiring a different diet. This patient is of interest in the present connection, however, since she developed, at the end of about three months, a roughened condition of the skin of the forehead and nose that was suggestive of and may possibly have been pellagra. The condition was not sufficiently characterized to enable us to make a diagnosis. The remaining 27 patients were under continuous treatment and observation for a full year. None of these presented any evidence even suggestive of pellagra, although four of them had a record of 2 attacks of the disease, three of 3 attacks, five of 4 attacks, one of 6 attacks, and one of 9 attacks. Thus considering the patient presenting the suspicious but uncertain skin lesions as a case of pellagra, we had at most one recurrent attack among 28 patients during a period of 12 months. Since in the light of repeated experience it seems to us safe to state that in the absence of the wheat germ or other equivalent preventive food upward of 40 or 50 per cent of them would have suffered a recurrence within a period of from three to seven or eight months, the development of, at most, one case under the circumstances mentioned would seem convincing evidence of the preventive action of the wheat germ and thus of the presence of the pellagra-preventive factor in commercial wheat germ.

Discussion.—The demonstration that wheat germ contains the pellagra preventive (P–P) is of interest from several points of view. It is of interest in the first place in that it is in harmony with certain of our previously recorded results (2) tending to show that the substances possessing black tongue-preventive potency are also preventives of pellagra, and thus constitutes additional evidence of the soundness of our working hypothesis that black tongue of dogs is the analogue of pellagra in man (2). In this connection it may be noted that since wheat germ is one of the substances known to contain the so-called vitamin B, the demonstration that it contains the pellagra preventive is in harmony with and strengthens the view, referred to in the preceding section of this report, that substances containing the so-called vitamin B contain factor P–P.

It is of interest furthermore in that it enables us to make a direct comparison of the pellagra-preventive potency of the germ with that of the cowpeas. The daily allowance of the wheat germ was, as already remarked, the same as that of the cowpeas and, as may be

seen by comparing Tables 1 and 2 with Tables 3 and 4, the basic portion of the diet in the two studies was roughly similar. The results recorded in the foregoing indicate, however, that the wheat germ-supplemented diet was appreciably more effective so that it may be concluded that the wheat germ was, gram for gram, somewhat richer in factor P–P than was the cowpea. How much richer it is impossible to say. The demonstration is of interest finally in that it suggests the advantage of including in the dietary, particularly of those in the area of pellagra endemicity, certain of the milling products of wheat, wheat middling for example, which normally contain a considerable percentage of the germ and some of the bran.

In closing it may perhaps be well to remark that since our study was made with commercial wheat germ which contains some bran the results herein reported may, strictly speaking, have been due to either one or, more probably, to the combined action of both of these parts of the wheat kernel.

SUMMARY AND CONCLUSIONS

1. The pellagra-preventive action of the cowpea (*Vigna sinensis*) and of commercial wheat germ have been studied.

2. The pellagra-preventive factor (P–P) is present in the cowpea (and probably in the soy bean) but in relatively small amounts.

3. The pellagra-preventive factor (P–P) is present in commercial wheat germ.

4. Commercial wheat germ is probably somewhat richer in factor P–P than is the cowpea.

5. It would be advantageous to include in the dietary, particularly of those in the area of pellagra endemicity, milling products of wheat containing as high a percentage as practicable of the germ and the bran.

6. Added strength is furnished the view that foods known to contain the so-called vitamin B contain the P–P factor.

7. The experience with wheat germ constitutes evidence of the soundness of the hypothesis that black tongue of dogs is the analogue of pellagra in man.

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HEALTH CONDITIONS AND STUDENT WELFARE WORK AMONG GERMAN UNIVERSITY STUDENTS

A decree of the ministry of education of the State of Baden, Germany, dated December 4, 1924, requires that periodical medical examinations be given to the students in all public educational institutions in the State, for the purpose of providing information regarding health conditions, to facilitate the giving of proper and timely medical advice to students, to discover and to remove or ameliorate physical defects, and to combat the diseases found among the various student bodies. According to the American consul at Stuttgart, who has supplied the information, the system is at present fully operative only in Karlsruhe, having not yet been completely put in operation in the other two large Baden university centers of Freiburg and Heidelberg. It is stated that the improvement in health conditions noted recently among German university students is largely the result of the physical examinations and welfare work.

Heidelberg.—A large percentage of German students, both male and female, take an active part in sports or gymnastic exercises. The obligatory medical examinations of the students at Heidelberg in the summer of 1926 showed a considerable improvement in the health of the student body, especially among the women, who are said to consider a regular program of physical exercise a normal part of their student activities and are generally more faithful to the régime than are the men.

Among the diseases and physical defects found in the 719 students (584 males, 135 females) were the following:

	Number	Per cent
Tuberculosis (pulmonary)	3	0.4
Rheumatism	2	.3
Chronic catarrh	6	.8
Disorders of the eye (myopia, hyperopia)	49	6.0
Conjunctivitis	2	.3
Enlarged thyroid:		
Slight	88	12.3
Moderate	25	3.4
Marked	2	.3
Rhachitic teeth	14	2.0
Curvature of spine	47	6.5
Flat foot	154	21.4

A comparatively high percentage of female students (15.8 per cent) were found to have enlarged thyroid glands. Many of the cases came from North Germany. These students were given prophylactic treatments. Two new cases of pulmonary tuberculosis were discovered, and both students were sent to a sanatorium for special treatment.

Karlsruhe Superior Schools.—Of 410 students (391 males, 19 females) examined in the Karlsruhe Superior Schools, 225, or 62.4 per cent, were found to be free from all diseases and notable physical defects. In the remaining 37.6 per cent, the following were among the conditions found:

	Number	Per cent of total examined
Curvature of spine	35	8.5
Flat foot	70	17.0
Enlarged thyroid:		
Slight	116	28.0
Moderate and marked	10	2.4
Exophthalmic (Graves's sign)	1	.2
Organic heart disease	5	1.2
Functional heart disorders (6 stated to be caused by nicotine)	17	4.1
Pulmonary tuberculosis	3	.7
Diseases of the kidneys	3	.7

It is stated that some of the cases of curvature of the spine are the result of undernourishment during the war years and that others are the result of bad posture in the primary and secondary schools.

The students with enlarged thyroids are designated the "victims of regional conditions," the cause being positively traced to the lack of iodine in the diet in the locality from which these students came. The German housewives in that region have begun the use of iodized salt.

Following the examinations, one student was sent to a tuberculosis sanatorium and five students found underdeveloped or undernourished were placed under the charge of the students' social welfare committee for guidance.

In the State of Wurttemberg the University of Tuebingen has an insurance feature which is operative from the date of matriculation. This provides for financial relief in case of sickness, and a medical examination is required. The Technical College of Stuttgart, while not having the insurance system, requires that each student submit to a medical examination when he matriculates.

THE SUDAN AND THE BELGIAN CONGO BECOME MEMBERS OF THE INTERNATIONAL OFFICE

The Bulletin Mensuel for June, 1927, published by the Office International d'Hygiène publique, makes the following announcement of the adherence of the Governments of the Sudan and the Belgian Congo to the agreement of December 9, 1907, establishing the International Office:

1. In a communication dated December 9, 1926, addressed to the Government of Italy, in accordance with the provision of article 6 (of the arrangement of December 9, 1907), the Sudan Government adheres to the convention and places itself, for sharing the expenses of the office, in the fifth class, as provided for in article 11 of the organic by-laws.

2. On March 21, 1927, the Belgian Government, in accordance with the provisions of article 6, notified the Italian Government of the adherence of the Belgian Congo to the convention. The Belgian Congo places itself, for participation in the expenses of the office, in the fourth class, as provided for in article 11 of the organic by-laws.

Twelve nations ratified the agreement of December 9, 1907, creating the International Office d'Hygiène publique, but there are now 46 countries (including dominions, colonies, and protectorates) participating in the work of the office. These countries are as follows:

Algeria.
Argentine Republic.
Australia.
Belgium.
Belgian Congo.
Bolivia.
Brazil.
British India.
Bulgaria.
Canada.
Chile.
Czechoslovakia.
Denmark.
Egypt.
France.
French Africa.
French Indo-China.
Great Britain.
Greece.
Italy.
Japan.
Luxemburg (Grand Duchy of).
Madagascar.
Mexico.
Monaco (Principality of).
Morocco.
Netherlands.
Netherlands Indies.
New Zealand.
Norway.
Persia.
Peru.
Poland.
Portugal.
Rumania.
Serbs, Croats, and Slovenes (Kingdom of).
Spain.
Sweden.
Switzerland.
Sudan.
Tunis.
Turkey.
Union of Socialist Soviet Republics.
Union of South Africa.
United States of America.
Uruguay.

DEATH RATES IN A GROUP OF INSURED PERSONS

Rates for Principal Causes of Death for July, 1927

The accompanying table is taken from the Statistical Bulletin for August, 1927, published by the Metropolitan Life Insurance Co., and presents the mortality experience of the industrial department of the company for July, 1927, as compared with that for June, and for July, 1926. The rates are based on a strength of approximately 18,000,000 insured persons in the United States and Canada.

July was the seventh successive month of 1927 to register improved health conditions, as compared with the corresponding month of 1926, the death rate for July of this year being 7.8 per 1,000, as compared with 8.4 last year, a decline of 7.1 per cent. July also showed the usual seasonal drop from the death rate for the preceding month (9.2).

Each of the diseases the deaths from which are of major numerical importance registered declines from the rates for last year. Tuberculosis declined from 99.6 to 90.5 per 100,000, or 9.1 per cent; cancer from 70.1 to 65.6, or 6.4 per cent; cerebral hemorrhage from 48.9 to 46.8 or 4.3 per cent; organic heart disease from 119 to 111.5, or 6.3 per cent; pneumonia from 48.8 to 43.4, or 11.1 per cent; and Bright's disease from 62.1 to 60.3, or 2.9 per cent.

On the other hand, of the diseases listed in the accompanying table, the only ones to show higher death rates than those recorded in July of last year are typhoid fever, diphtheria, respiratory conditions other than pneumonia, and diabetes which registered a very slight increase. The increase in typhoid fever mortality is stated to be due in large part to the deaths of policyholders in the Province of Quebec, Canada. As has been the case every month so far this year, diphtheria registered a higher death rate than in the corresponding month of 1926. However, the mortality from this disease is lower this year than in any prior year except 1926, and the slight rise this year is considered an interruption that was sometime to be expected in such a remarkable decline as that which has taken place in the diphtheria death rate in recent years. Such a check occurred last year in the decline in the death rate for tuberculosis; but this check has been followed in 1927 by a more pronounced drop than ever.

Automobile fatalities again increase, the death rate for this cause being 19.7 for July, 1927, as compared with 17.5 for July last year.

Death rates (annual basis) for principal causes per 100,000 lives exposed, June and July, 1927, and July and year, 1926

[Industrial department, Metropolitan Life Insurance Co.]

Causes of death	Rate per 100,000 lives exposed[1]			
	July, 1927	June, 1927	July, 1926	Year 1926
Total, all causes	780.0	923.2	835.5	945.6
Typhoid fever	5.1	6.1	3.2	4.2
Measles	2.7	5.7	6.7	10.2
Scarlet fever	2.1	3.5	2.6	3.4
Whooping cough	6.1	6.9	8.8	9.6
Diphtheria	7.8	10.4	5.9	9.7
Influenza	6.2	12.0	9.4	31.1
Tuberculosis (all forms)	90.5	99.8	99.6	99.0
Tuberculosis of respiratory system	78.8	80.9	85.7	86.7
Cancer	65.6	74.0	70.1	73.7
Diabetes mellitus	13.7	16.9	13.3	16.7
Cerebral hemorrhage	46.8	57.5	48.9	55.6
Organic diseases of heart	111.5	138.7	119.0	134.3
Pneumonia (all forms)	43.4	69.7	48.8	98.2
Other respiratory diseases	12.1	16.7	10.8	13.0
Diarrhea and enteritis	24.5	22.0	31.7	29.8
Bright's disease (chronic nephritis)	60.3	75.5	62.1	73.5
Puerperal state	13.4	16.3	14.7	15.3
Suicides	7.9	8.6	6.9	7.7
Homicides	6.7	7.6	7.6	7.0
Other external causes (excluding suicides and homicides)	76.8	69.0	72.1	62.3
Traumatism by automobiles	19.7	19.5	17.5	16.8
All other causes	177.0	206.3	193.4	191.0

[1] All figures include infants insured under 1 year of age.

PUBLIC HEALTH ENGINEERING ABSTRACTS

Studies of the Malaria Problem in Porto Rico. Anon. *Porto Rico Health Review*, vol. 2, No. 10, April, 1927, pp. 27–32. (Abstract by C. R. Fields.)

This is a part of malaria studies (Paper X) carried out in the island during 1924–25 by the International Health Board.

In Panama, regular extensive flights of *Anopheles* were observed in the evening and early morning, but nothing definite was learned, though certain observations seemed to indicate that possible concentrated flights occurred, which would influence malaria incidence.

In studying the habits of adult *Anopheles grabhamii*, it was found that fewer of this species were found in this region than of *Anopheles albimanus*. In 11 of the 27 night stations (40 per cent), *grabhamii* was never found at any time during the year. Of almost 400 *grabhamii* caught during the period of study, only 7 per cent were caught on human beings or dwellings at night. *Grabhamii* was also found feeding on cows, and a much higher percentage of these than *albimanus* was found on horses.

Anopheles vestitipennis were caught at half of the night stations some time during the year. All stations were in or bordering cane fields. The most *vestitipennis* were caught in the general region of bayous, but heavy breeding was also found during the wet season in temporary water deposits in cane field ditches. Possibly other breeding areas were overlooked. No observations were recorded of this mosquito biting other domestic animals than the horse.

Vestitipennis is the most active feeder of the three species, and it was found easy to keep this species alive in the laboratory for at least two weeks. It was easier to get *vestitipennis* than *albimanus* to bite human beings, and it was the hardest to induce *grabhamii* to feed on human blood. The average of night and day catches of all breeds of *Anopheles* shows the greatest rise to be in November, with a smaller rise in August.

Studies on the Bionomics of North American Anophelines. The Number of Annual Broods of A. Quadrimaculatus. Mark F. Boyd. *American Journal of Hygiene*, vol. 7, No. 3, May, 1927, pp. 264–275. (Abstract by H. B. Foote.)

Captures are expressed as "mosquitoes caught per man-hour of search," in order to give a more reasonable basis for comparing results of consecutive searches in the same territory and in comparing the prevalent density in different areas.

Data are based on catches in North Carolina and Georgia.

The author believes that few students of anophelines have given attention to the question of broods. He refers to James (James, S. P., Proc. 11th Meeting Anti-Malarial Advisory Comm., Palestine, 1925, p. 9) as the only writer whom he has found who has studied this phase of the problem.

Some Recent Experiments in Fly Control. R. J. Posson. Proceedings of the Nineteenth and Twentieth Conference of the American Association of Medical Milk Commissions and Certified Milk Producers Association of America. Pp. 322–327. (Abstract by W. D. Tiedeman.)

The experience of the United States Bureau of Dairying in controlling flies on an experimental farm at Beltsville, Md., during the years 1924 and 1925, is given in detail. House flies, which prefer horse manure as a breeding place, but breed readily in cow manure, and stable flies, which prefer damp straw or hay on which to lay eggs, but will readily lay eggs upon straw mixed with manure, had always been numerous.

In order to control breeding, all manure was hauled away at least once each week, and box stalls in which considerable straw was used were cleaned and the floors scraped regularly. The manure was either spread on fields or placed in large piles one-half mile from the buildings. Failure to remove manure on time resulted in a marked increase in flies. The author holds that the elimination of breeding places is the greatest factor in fly control.

Fly traps were also used in this work owing to the inability to eliminate all breeding places on the property and to the presence of breeding places on neighboring farms. In discussion it was brought out that experiments in liberating marked flies by the United States Department of Agriculture at Dallas, Tex., showed that the house fly traveled 11 miles in 4 to 7 days, and some were caught as far as 17 miles from the point of liberation. The length of flight indicates the necessity for using traps in addition to controlling local breeding places. Ten cyclindrical fly traps similar to those described in the United States Department of Agriculture Farmer's Bulletin No. 734 were used in scattered positions. They were baited with blackstrap molasses from sugar cane, diluted with three or four parts of water. When this mixture fermented, it drew flies in large numbers. Bait was replenished about once a week. The effect of the traps could be noticed after about 10 days' use during August when flies were numerous. During 1925 the 10 traps caught 86 gallons of flies estimated by making counts to run 50,000 or 60,000 flies to the gallon.

As an added protection against flies entering the milk room, a 30-inch electric fan was operated from the porch ceiling, causing a slight air current against the screen door which proved very effective in keeping flies off the screen door and porch.

To protect cattle from horn and stable flies, a spray, made by soaking 1 pound of partially opened dried pyrethrum flowers (purchased in 20-pound lots) in 2 gallons of kerosene oil for 48 hours, was used. This is a killing spray rather than a repellent. It cost from 35 to 40 cents per gallon. It was applied by air pressure sprayer using a nozzle capable of producing a very fine vapor. Horn flies were quickly killed if caught in a cloud of vapor as they swarmed after the first spray struck them. While horn flies lay their eggs in fresh droppings, their number was appreciably reduced after a week of daily spraying. Stable flies were killed

by spraying them as they were found sucking blood on the cows legs. Stable flies were much harder to control, however. Care should be exercised not to wet the cattle unnecessarily with the spray, as the kerosene is irritating. When this spray was used one hour before milking no difficulties were experienced in causing odors or tastes in the milk.

Results of this fly-control work are reported as satisfactory. No statement is given as to the total cost of control. There was considerable discussion of this paper.

The Public Health (Meat) Regulations, 1924. Brennan DeVine. *Journal of the Royal Sanitary Institute*, vol. 47, No. 11, May, 1927, pp. 654–668. (Abstract by L. M. Fisher.)

Regulations should be made to include dressed poultry and rabbits, canned foods, and made-up foods. Of 100 cases of food poisoning, 42 were due to canned foods, 15 to made-up foods, and only 6 to fresh meat.

The removal of the gutscraping and tripe cleaning from the actual slaughtering compartment lessens the chances of the meat becoming infected with fecal contents of the bowels. Such infection has in the past caused cases of meat poisoning. Meat sold from barrows in the streets should be kept behind glass, as well as meat exposed for sale in shops. Illicit slaughtering, carried on principally by small farmers, and nonnotification of diseased carcasses should be made serious offenses. The ministry of health should require all local authorities to enforce the meat regulations in their entirety.

Fifteen Years of Milk Control in the Oranges, New Jersey. F. J. Osborne, health officer, East Orange, N. J. *The Nation's Health*, vol. 9, No. 3, March 15, 1927, pp. 26–28. (Abstract by Ralph E. Irwin.)

As soon as a full time health officer was employed in the city of Orange, a survey was made of the milk situation. This resulted in the adoption of a milk ordinance and the establishment of inspection and laboratory control. This work resulted in such marked improvement that four other nearby municipalities joined with the city of Orange and formed the Milk Inspection Association of the Oranges. The adoption of uniform milk regulations and centralized control received the support of the producers and distributors of milk. To the milk dealers it meant "first, that the ignorant, careless, and indifferent dealers have been eliminated, and, second, that those remaining as survivors are able, by virtue of the strength of their position and the profit from the business, to maintain high sanitary standards, and, too, in great part, control their supplies themselves."

To the consumer this association means efficient administration, a safe and sanitary milk supply, and a sensible expenditure of public funds.

Oyster Producing Waters and Shellfish Sanitation in Relation to State and United States Certification Procedure. Elliot H. Gage. Proceedings of the Ninth Texas Water Works Short School. Pp. 281–284. (Abstract by Chester Cohen.)

The principal oyster producing waters in Texas are given, together with an account of the typical growths and occurrences in these areas. It is estimated that there are 119,000 acres actually in condition to produce oysters on the coast of Texas. The influencing factors and life habits of the oyster are given. The possibility of contamination through the habitat and method of taking food is brought out. A short history of shellfish sanitation is included, together with the most recent developments in this field. A summarized report of the committee on shellfish sanitation is included. The importance of certification is especially stressed, inasmuch as certification carries with it the adequate inspection, supervision, and regulation of the industry.

Imhoff Tank Gases and Odors. William D. Hatfield. *Public Works*, vol. 58, No. 6, June 1927, pp. 204–206. (Abstract by M. S. Foreman.)

The odor situation at the sewage plant at Decatur, Ill., has been serious on account of the strength and temperature of the sewage received. A large volume of condensed water comes from a starch plant, the temperature of which varies from 70° F. in winter to 104° F. in summer. The strength of the sewage varies from 500 to 1,000 p. p. m. of biochemical oxygen demand. The high temperature, combined with strong sewage makes ideal conditions for bacterial reduction, and are responsible for the odoriferous condition.

In 1924, a careful analysis of the odor situation was begun when the sewage plant was started. Analyses were made of the air and gases about the plant, to determine the hydrogen sulphide content. The major odors were found to be caused by (1) sewer gases coming from entrance to grit chamber; (2) turbulent sewage at outlet of grit chamber; (3) turbulent effluent from Imhoff tanks; (4) digestion gases from Imhoff tanks; (5) from sprays and stones of sprinkling filters. The quantity of sulphide in the digestion gases at Decatur is a function of the temperature and is shown in a table.

The total gas production was determined by covering one of the Imhoff tanks at the water level with a sloping wooden structure resembling the Imhoff collector. The volume of gas produced was found to be dependent on the temperature of the sludge digestion. The odoriferous condition about the plant is now practically eliminated when the Imhoff gases are burned. This is accomplished by means of a suction fan built so as to force the trapped gases into a red-hot oven.

Sewage Filtrate as a Source of Bacteriophage. Janet Anderson Caldwell. *Journal of Infectious Diseases*, vol. 40, No. 5, May, 1927, pp. 575–578. (Abstract by L. M. Fisher.)

The adaptation of a bacteriophage strain to a nonsusceptible organism is often tedious and unsuccessful. Adapted bacteriophage is probably inferior to one which is active when isolated. Active bacteriophage seems to be ubiquitous but difficult of isolation.

Sewage filtrate obtained by filtering city sewage twice through Berkfeld filters yielded a clear, colorless, and usually odorless fluid, which was found to be a much better source of virulent antityphoid and antidysentery bacteriophage than the excreta of typhoid patients.

Sewage filtrate yields a potent bacteriophage for practically all strains of *B. coli* isolated from urinary infections; and its use as a source of bacteriophage will materially increase the number of urinary infections that can be treated with the bacteriophage, and will avoid confusion in the identification of resistant strains of bacteria.

Distribution of Cellulose in Imhoff Tanks. H. Heukelekian. *Public Works*, vol. 58, No. 4, April, 1927, pp. 133–135. (Abstract by A. S. Bedell.)

This is a preliminary report on the cellulose content and distribution in fresh sewage solids of an Imhoff tank at Plainfield, N. J. The solids were collected by suspending pails for 24 hours in the flowing through compartment at the inlet, middle portion, and outlet. Samples from each point and from the mixture of the three portions were analysed. A table is given showing results of solids concentration, volatile matter, and cellulose contents. A selective settling is indicated and, in view of the relation of cellulose to CO_2 production, the efficiency of the tank would be greatly affected by the design and the opportunity for reversal of flow.

DEATHS DURING WEEK ENDED SEPTEMBER 17, 1927

Summary of information received by telegraph from industrial insurance companies for week ended September 17, 1927, and corresponding week of 1926. (From the Weekly Health Index, September 21, 1927, issued by the Bureau of the Census, Department of Commerce)

	Week ended Sept. 17, 1927	Corresponding week 1926
Policies in force	68, 711, 839	65, 301, 677
Number of death claims	12, 180	11, 485
Death claims per 1,000 policies in force, annual rate	9. 2	9. 2

Deaths from all causes in certain large cities of the United States during the week ended September 17, 1927, infant mortality, annual death rate, and comparison with corresponding week of 1926. (From the Weekly Health Index, September 21, 1927, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Sept. 17, 1927		Annual death rate per 1,000 corresponding week 1926	Deaths under 1 year		Infant mortality rate, week ended Sept. 17, 1927 [4]
	Total deaths	Death rate [1]		Week ended Sept. 17, 1927	Corresponding week 1926	
Total (67 cities)	6,281	11.1	[3] 10.9	744	[3] 848	[4] 59
Akron	29			3	1	32
Albany [5]	33	14.3	11.4	4	2	83
Atlanta	76			15	9	
White	45			7	3	
Colored	31	(6)		8	6	
Baltimore [5]	213	13.6	12.3	25	25	77
White	156		10.7	16	19	62
Colored	57	(6)	21.5	9	6	140
Birmingham	63	15.3	12.1	8	11	
White	39		11.0	6	4	
Colored	24	(6)	13.8	2	7	
Boston	174	11.4	10.6	29	20	81
Bridgeport	29			4	3	74
Buffalo	105	10.0	11.7	16	10	67
Cambridge	19	8.0	7.7	3	2	53
Camden	29	11.4	7.2	3	6	52
Canton	17	7.8	9.5	2	5	47
Chicago [5]	645	10.8	10.4	79	91	68
Cincinnati	118	14.9	14.5	15	19	94
Cleveland	160	8.5	9.6	24	17	64
Columbus	83	14.9	10.8	11	9	102
Dallas	56	14.0	12.3	10	11	
White	41		12.7	7	8	
Colored	15	(6)	9.7	3	3	
Dayton	38	11.0	11.2	4	9	66
Denver	71	12.8	13.7	16	11	
Des Moines	34	11.9	9.6	2	5	33
Detroit	239	9.3	10.2	45	50	71
Duluth	21	9.5	10.2	2	1	43
El Paso	34	15.6	12.0	7	5	
Erie	28			2	2	39
Fall River [5]	26	10.2	8.8	7	4	124
Flint	31	11.3	11.1	8	13	131
Fort Worth	35	11.1	7.2	8	4	
White	27		6.0	6	3	
Colored	8	(6)	16.5	2	1	
Grand Rapids	35	11.5	10.7	4	6	59
Houston	47			5	8	
White	28			4	5	
Colored	19	(6)		1	3	
Indianapolis	101	14.1	11.5	8	18	63
White	82		11.1	6	16	54
Colored	19	(6)	14.2	2	2	122
Jersey City	55	8.9	9.2	12	5	90
Kansas City, Kans	30	13.4	11.6	3	4	58
White	26		10.8	1	3	22
Colored	4	(6)	15.3	2	1	304
Kansas City, Mo	101	13.8	15.2	8	18	
Knoxville	29	14.8		6		
White	23			5		
Colored	6	(6)		1		

Footnotes on p. 2400.

Deaths from all causes in certain large cities of the United States during the week ended September 17, 1927, infant mortality, annual death rate, and comparison with corresponding week of 1926—Continued

City	Week ended Sept. 17, 1927		Annual death rate per 1,000 corresponding week 1926	Deaths under 1 year		Infant mortality rate, week ended Sept. 17, 1927 [2]
	Total deaths	Death rate [1]		Week ended Sept. 17, 1927	Corresponding week 1926	
Los Angeles	251			18	15	52
Louisville	65	10.6	14.3	3	17	26
White	47		12.2	3	13	29
Colored	18	(6)	25.5	0	4	0
Lowell	21	9.9	12.3	1	3	19
Lynn	27	13.4	14.0	1	4	26
Memphis	78	22.7	18.3	11	7	
White	47		14.2	8	4	
Colored	31	(6)	25.7	3	3	
Milwaukee	100	9.8	8.3	10	7	47
Minneapolis	78	9.2	9.0	9	9	51
Nashville [3]	42	15.9	20.6	3	6	
White	26		18.6	2	4	
Colored	16	(6)	25.4	1	2	
New Bedford	21	9.2	10.9	1	6	17
New Haven	29	8.2	6.0	5	6	70
New Orleans	154	18.9	19.3	18	20	
White	80		14.6	9	9	
Colored	74	(6)	32.5	9	11	
New York	1,200	10.5	9.9	122	132	50
Bronx Borough	144	8.1	8.1	9	12	29
Brooklyn Borough	397	9.1	8.9	50	51	52
Manhattan Borough	507	14.6	13.3	54	53	63
Queens Borough	115	7.4	7.4	8	13	34
Richmond Borough	37	13.1	9.1	1	3	19
Newark, N. J	81	9.1	11.7	10	17	50
Oakland	64	12.5	10.4	4	8	47
Oklahoma City	31			5	2	
Omaha	60	14.3	16.2	4	7	44
Paterson	26	9.4	8.4	1	5	18
Philadelphia	372	9.5	10.4	49	59	65
Pittsburgh	134	10.9	12.1	22	29	77
Portland, Oreg	47			4	2	42
Providence	53	9.8	10.6	7	9	59
Richmond	48	13.0	14.1	5	12	66
White	31		11.7	1	5	20
Colored	17	(6)	19.9	4	7	152
Rochester	66	10.6	8.0	10	3	84
St. Louis	216	13.4	11.2	17	16	
St. Paul	54	11.3	11.8	2	3	18
Salt Lake City [3]	25	9.6	11.0	2	4	30
San Antonio	35	8.6	15.3	5	14	
San Diego	36	16.3	17.5	4	0	85
San Francisco	117	10.6	10.4	3	3	19
Schenectady	20	11.2	6.7	2	1	60
Seattle	70			2	2	21
Somerville	17	8.7	9.4	1	1	36
Spokane	28	13.4	14.4	0	4	0
Springfield, Mass	28	9.9	10.8	1	0	15
Syracuse	34	9.0	14.4	6	6	77
Tacoma	18	8.8	7.4	1	1	24
Toledo	79	13.6	9.2	7	9	67
Trenton	45	17.1	9.7	10	2	174
Washington, D. C	119	11.5	11.8	10	15	58
White	70		10.3	3	9	25
Colored	49	(6)	16.0	7	6	129
Waterbury	20			0	3	0
Wilmington, Del	21	8.7	11.4	2	5	50
Worcester	32	8.6	11.1	3	11	36
Yonkers	13	5.7	7.2	1	1	23
Youngstown	30	9.3	8.2	2	5	28

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.
[3] Data for 66 cities.
[4] Data for 62 cities.
[5] Deaths for week ended Friday, Sept. 16, 1927.
[6] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers

Reports for Week Ended September 24, 1927

DIPHTHERIA	Cases
Alabama	64
Arkansas	12
California	61
Colorado	16
Connecticut	17
Delaware	2
Florida	28
Georgia	41
Idaho	2
Illinois	88
Indiana	10
Iowa [1]	23
Kansas	39
Louisiana	48
Maine	5
Maryland [1]	23
Michigan	52
Minnesota	27
Mississippi	29
Missouri	24
Nebraska	1
New Jersey	102
New Mexico	10
New York [2]	59
North Carolina	75
Oklahoma [3]	90
Oregon	9
Pennsylvania	107
Rhode Island	7
South Carolina	88
South Dakota	4
Tennessee	36
Texas	30
Utah [1]	7
Washington	12
West Virginia	26
Wisconsin	39

[1] Week ended Friday.
[2] Exclusive of New York City.
[3] Exclusive of Oklahoma City and Tulsa.

INFLUENZA	Cases
Alabama	13
Arkansas	9
California	5
Connecticut	1
Florida	4
Georgia	17
Illinois	3
Indiana	14
Louisiana	6
Maryland [1]	8
Mississippi	3
Missouri	3
Nebraska	1
New Jersey	3
Oklahoma [2]	19
Oregon	5
South Carolina	258
Tennessee	8
Texas	1
West Virginia	10
Wisconsin	6

MEASLES	
Alabama	21
Arkansas	3
California	36
Colorado	3
Connecticut	3
Delaware	3
Florida	1
Georgia	8
Illinois	26
Indiana	11
Iowa [1]	1
Kansas	33
Louisiana	5
Maine	7

[1] Week ended Friday.
[2] Exclusive of Oklahoma City and Tulsa.

MEASLES—continued

	Cases
Maryland [1]	11
Michigan	13
Minnesota	4
Missouri	2
Montana	2
Nebraska	2
New Jersey	5
New Mexico	9
New York [2]	30
North Carolina	75
Oklahoma [3]	8
Oregon	8
Pennsylvania	19
South Carolina	53
Tennessee	14
Texas	5
Washington	27
West Virginia	24
Wisconsin	73
Wyoming	7

MENINGOCOCCUS MENINGITIS

	Cases
Alabama	2
California	4
Connecticut	2
Illinois	4
Iowa [1]	2
Maryland [1]	1
Michigan	1
Minnesota	4
Mississippi	1
Missouri	1
New Jersey	3
North Carolina	2
Oklahoma [3]	1
Oregon	1
Pennsylvania	1
Tennessee	1
Washington	2
West Virginia	1
Wisconsin	6

POLIOMYELITIS

	Cases
Alabama	2
Arizona	2
Arkansas	1
California	43
Colorado	4
Connecticut	12
Florida	1
Illinois	42
Iowa [1]	5
Kansas	19
Louisiana	1
Maine	15
Maryland [1]	2
Michigan	24
Minnesota	8
Missouri	23
Nebraska	8
New Jersey	37
New Mexico	19
New York [2]	18
Oklahoma [3]	10
Oregon	21

[1] Week ended Friday.
[2] Exclusive of New York City.
[3] Exclusive of Oklahoma City and Tulsa.

POLIOMYELITIS—continued

	Cases
Pennsylvania	42
Rhode Island	4
South Carolina	4
South Dakota	2
Tennessee	4
Texas	25
Utah [1]	4
Vermont	1
Virginia	1
Washington	11
West Virginia	18
Wisconsin	14
Wyoming	1

SCARLET FEVER

	Cases
Alabama	11
Arizona	1
Arkansas	4
California	75
Colorado	22
Connecticut	18
Delaware	4
Florida	6
Georgia	11
Idaho	4
Illinois	78
Indiana	54
Iowa [1]	11
Kansas	46
Louisiana	10
Maine	17
Maryland [1]	22
Michigan	57
Minnesota	48
Mississippi	12
Missouri	32
Montana	6
Nebraska	12
New Jersey	45
New Mexico	5
New York [2]	71
North Carolina	40
Oklahoma [3]	16
Oregon	5
Pennsylvania	167
Rhode Island	10
South Carolina	22
South Dakota	10
Tennessee	14
Texas	18
Utah [1]	4
Vermont	2
Washington	13
West Virginia	56
Wisconsin	65
Wyoming	4

SMALLPOX

	Cases
Alabama	4
California	10
Colorado	1
Idaho	1
Illinois	17
Indiana	15

[1] Week ended Friday.
[2] Exclusive of New York City.
[3] Exclusive of Oklahoma City and Tulsa.

SMALLPOX—continued	Cases
Iowa [1]	4
Louisiana	1
Michigan	12
Missouri	4
Montana	3
New York [2]	2
North Carolina	13
Oklahoma [3]	3
Oregon	5
South Carolina	2
South Dakota	5
Tennessee	11
Texas	6
Utah [1]	17
Virginia	1
Washington	5
West Virginia	9
Wisconsin	16
Wyoming	1
TYPHOID FEVER	
Alabama	57
Arizona	8
Arkansas	66
California	19
Colorado	15
Connecticut	9
Delaware	5
Florida	10
Georgia	44
Idaho	1

[1] Week ended Friday.
[2] Exclusive of New York City.
[3] Exclusive of Oklahoma City and Tulsa.

TYPHOID FEVER—continued	Cases
Illinois	45
Indiana	34
Iowa [1]	3
Kansas	25
Louisiana	31
Maine	13
Maryland [1]	38
Michigan	8
Minnesota	4
Mississippi	11
Missouri	32
Montana	1
Nebraska	1
New Jersey	26
New Mexico	14
New York [2]	31
North Carolina	23
Oklahoma [3]	110
Oregon	10
Pennsylvania	36
Rhode Island	1
South Carolina	78
South Dakota	3
Tennessee	70
Texas	23
Utah [1]	4
Washington	7
West Virginia	59
Wisconsin	8
Wyoming	4

[1] Week ended Friday.
[2] Exclusive of New York City.
[3] Exclusive of Oklahoma City and Tulsa.

Reports for week ended September 17, 1927

DIPHTHERIA	Cases
District of Columbia	15
North Dakota	6
MEASLES	
District of Columbia	1
North Dakota	5
POLIOMYELITIS	
North Dakota	1
SCARLET FEVER	
District of Columbia	7
North Dakota	15
TYPHOID FEVER	
District of Columbia	1
North Dakota	2

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
July, 1927										
Pennsylvania	9	703	----	2	1,316	4	8	855	11	157
August, 1927										
Arkansas	0	13	46	995	50	253	4	9	11	192
Georgia	1	84	91	272	21	39	3	55	7	330
Iowa	8	42	----	----	16	----	9	45	37	29
Louisiana	0	77	40	348	13	71	6	28	3	167
Massachusetts	5	216	21	1	253	3	176	349	0	69
Minnesota	9	119	3	----	32	----	12	195	0	32
New Jersey	2	274	12	4	36	----	79	133	0	53
Ohio	9	323	19	3	51	----	271	299	21	168
South Carolina	0	221	478	2,359	218	501	5	51	38	427
Vermont	0	12	----	----	58	----	0	----	0	2
West Virginia	4	53	7	----	31	----	35	109	47	157
Wyoming	0	1	----	----	11	----	2	10	0	3

July, 1927

Pennsylvania:	Cases
Anthrax	1
Chicken pox	984
German measles	119
Impetigo contagiosa	4
Lethargic encephalitis	8
Mumps	733
Ophthalmia neonatorum	5
Puerperal fever	6
Tetanus	11
Whooping cough	1,033

August, 1927

Anthrax:	
New Jersey	1
Chicken pox:	
Arkansas	36
Georgia	4
Iowa	12
Louisiana	3
Massachusetts	72
Minnesota	54
New Jersey	65
Ohio	114
South Carolina	33
Vermont	13
West Virginia	3
Wyoming	5
Conjunctivitis:	
Georgia	1
Dengue:	
Georgia	5
South Carolina	36
Dysentery:	
Georgia	22
Louisiana	1
Massachusetts	5
Minnesota	4
New Jersey	4
Ohio	2
German measles:	
Iowa	2
Massachusetts	8
New Jersey	15
Ohio	3
Wyoming	2
Hookworm disease:	
Arkansas	1
Georgia	12
Louisiana	7
South Carolina	123
Lead poisoning:	
Massachusetts	8
New Jersey	6
Ohio	7
Lethargic encephalitis:	
Louisiana	4
Massachusetts	12
Ohio	4
Mumps:	
Arkansas	108
Georgia	16
Iowa	9
Louisiana	1
Massachusetts	145

August, 1927—Continued

Mumps—Continued.	Cases
Ohio	147
Vermont	45
Wyoming	4
Ophthalmia neonatorum:	
Arkansas	2
Massachusetts	152
New Jersey	2
Ohio	117
South Carolina	20
Paratyphoid fever:	
Georgia	4
Louisiana	2
New Jersey	13
Ohio	2
South Carolina	23
Wyoming	1
Puerperal fever:	
Ohio	2
Rabies in animals:	
South Carolina	10
Vermont	1
Rabies in man:	
Georgia	1
Ohio	2
Rocky Mountain spotted or tick fever:	
Wyoming	1
Septic sore throat:	
Georgia	26
Massachusetts	9
Ohio	50
Tetanus:	
Georgia	1
Iowa	1
Louisiana	3
Massachusetts	2
Minnesota	3
Ohio	2
Trachoma:	
Arkansas	10
Georgia	1
Louisiana	1
Massachusetts	3
New Jersey	1
Ohio	1
Tularaemia:	
Minnesota	1
Wyoming	2
Typhus fever:	
Georgia	1
Whooping cough:	
Arkansas	104
Georgia	48
Iowa	64
Louisiana	25
Massachusetts	365
Minnesota	53
New Jersey	554
Ohio	529
South Carolina	267
Vermont	31
West Virginia	79
Wyoming	21

Number of Cases of Certain Communicable Diseases Reported for the Month of June, 1927, by State Health Officers

State	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Alabama	65	65	820	44	35	97	447	210	225
Arizona	5	16	162	32	30	0	76	17	9
Arkansas	132	16	264	112	15	23	49	131	222
California	1,222	511	2,966	715	672	79	995	62	914
Colorado	96	106	546	15	386	15	126	19	47
Connecticut	469	138	252	167	277	0	165	5	98
Delaware	12	6	20	1	10	0	5	3	2
District of Columbia	52	54	15		65	30	126	5	39
Florida	19	57	200	15	21	165	129	86	140
Georgia	40	32	246	83	42	56	61	234	135
Idaho	18	7	163	12	25	34	[1] 7	8	25
Illinois	873	475	2,084	1,453	806	63	1,362	70	1,089
Indiana [2]									
Iowa	92	63	458	84	115	91	77	4	73
Kansas	217	35	1,253	67	169	74	197	31	389
Kentucky [3]									
Louisiana	19	60	293	26	15	27	[1] 197	116	112
Maine	59	9	339	18	88	0	26	9	129
Maryland	300	232	81	79	160	5	302	44	350
Massachusetts	874	388	1,734	1,044	1,587	0	594	18	406
Michigan	820	334	900	927	921	151	532	29	613
Minnesota	773	94	341		474	10	377	18	71
Mississippi	249	38	856	330	21	10	284	237	1,737
Missouri	94	106	487	294	175	95	146	38	330
Montana	43	6	71	3	62	45	36	7	54
Nebraska	49	37	317	66	74	38	20	5	35
Nevada [4]									
New Hampshire		2			34			3	
New Jersey	1,197	431	196		816	1	446	20	677
New Mexico [2]									
New York	2,556	1,875	3,699	2,056	2,208	18	1,425	91	1,382
North Carolina	247	53	4,974		49	94		151	2,204
North Dakota	33	8	117	3	89	6	5	2	15
Ohio	6,706	388	467	670	750	197	701	50	576
Oklahoma [5]	41	24	875	19	43	161	88	153	68
Oregon	74	24	618	59	45	69	38	24	74
Pennsylvania	1,306	645	1,865	1,321	1,276	2	784	78	652
Rhode Island	71	48	30	23	107	0	40	0	22
South Carolina	214	55	824	14	13	35	157	378	661
South Dakota	19	13	142	2	73	25	7	10	21
Tennessee	65	21	197	27	47	54	186	247	282
Texas [3]									
Utah [3]									
Vermont	107	4	335	141	30	0	17	1	125
Virginia	328	56	1,249		82	54	118	111	1,331
Washington	265	45	1,714	150	173	145	115	20	146
West Virginia	70	43	564		115	133	80	46	150
Wisconsin	775	113	2,473	786	422	73	172	14	393
Wyoming	9	1	161	2	38	7			27

[1] Pulmonary.
[2] Report not received at time of going to press.
[3] Reports received weekly.
[4] Reports received annually.
[5] Exclusive of Oklahoma City and Tulsa.

Case Rates per 1,000 Population (Annual Basis) for the Month of June, 1927

State	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Alabama	0.31	0.31	3.91	0.21	0.17	0.46	2.13	1.00	1.07
Arizona	.13	.42	4.29	.85	.80	.00	2.01	.45	.24
Arkansas	.84	.10	1.67	.71	.09	.15	.31	.83	1.40
California	3.35	1.40	8.14	1.96	1.84	.22	2.73	.17	2.51
Colorado	1.09	1.20	6.19	.17	4.37	.17	1.43	.22	.53
Connecticut	3.49	1.03	1.87	1.24	2.06	.00	1.23	.04	.73
Delaware	.60	.30	1.00	.05	.50	.00	.25	.15	.10
District of Columbia	1.17	1.22	.34	----	1.46	.68	2.84	.11	.88
Florida	[1]17	.51	1.79	.13	.19	1.47	1.15	.77	1.25
Georgia	.15	.12	.94	.32	.16	.21	.23	.90	.52
Idaho	.41	.16	3.71	.27	.57	.77	[1].16	.18	.57
Illinois	1.46	.79	3.48	2.42	1.34	.11	2.27	.12	1.82
Indiana [2]	----	----	----	----	----	----	----	----	----
Iowa	.46	.32	2.30	.42	.58	.46	.39	.02	.37
Kansas	1.44	.23	8.34	.45	1.12	.49	1.31	.21	2.59
Kentucky [3]	----	----	----	----	----	----	----	----	----
Louisiana	.12	.38	1.84	.16	.09	.17	[1]1.24	.73	.70
Maine	.91	.14	5.20	.28	1.35	.00	.40	.14	1.98
Maryland	2.29	1.77	.62	.60	1.22	.04	2.30	.34	2.67
Massachusetts	2.51	1.11	4.97	2.99	4.55	.00	1.70	.05	1.16
Michigan	2.22	.91	2.44	2.51	2.50	.41	1.44	.08	1.66
Minnesota	3.50	.43	1.54	----	2.15	.05	1.71	.08	.32
Mississippi	1.69	.26	5.82	2.24	.14	.07	1.93	1.61	11.80
Missouri	.33	.37	1.69	1.02	.61	.23	.51	.13	1.14
Montana	.73	.10	1.21	.05	1.06	.77	.61	.12	.92
Nebraska	.43	.32	2.76	.58	.64	.33	.17	.04	.31
Nevada [4]	----	----	----	----	----	----	----	----	----
New Hampshire	----	.05	----	----	.91	----	----	.08	----
New Jersey	3.88	1.40	.64	----	2.65	.00	1.45	.06	2.20
New Mexico [3]	----	----	----	----	----	----	----	----	----
New York	2.72	2.00	3.94	2.19	2.35	.02	1.52	.10	1.47
North Carolina	1.04	.22	20.89	----	.21	.39	----	.63	9.26
North Dakota	.63	.15	2.22	.06	1.69	.11	.09	.04	.28
Ohio	12.16	.70	.85	1.21	1.36	.36	1.27	.09	1.04
Oklahoma [5]	.23	.14	5.01	.11	.25	.92	.50	.88	.39
Oregon	1.01	.33	8.45	.81	.62	.94	.52	.33	1.01
Pennsylvania	1.63	.81	2.33	1.65	1.60	.00	.98	.10	.82
Rhode Island	1.23	.83	.52	.40	1.85	.60	.60	.00	.38
South Carolina	1.41	.36	5.43	.09	.09	.23	1.04	2.49	4.36
South Dakota	.33	.23	2.48	.03	1.28	.44	.12	.17	.37
Tennessee	.32	.10	.96	.13	.23	.26	.91	1.21	1.38
Texas [3]	----	----	----	----	----	----	----	----	----
Utah [3]	----	----	----	----	----	----	----	----	----
Vermont	3.69	.14	11.56	4.87	1.04	.00	.59	.03	4.32
Virginia	1.57	.27	5.97	----	.39	.26	.56	.53	6.36
Washington	2.06	.35	13.35	1.17	1.35	1.13	.90	.16	1.14
West Virginia	.50	.31	4.05	----	.83	.95	.57	.33	1.08
Wisconsin	3.23	.47	10.31	3.28	1.76	.30	.72	.06	1.64
Wyoming	.45	.05	8.13	.10	1.92	.35	----	----	1.36

[1] Pulmonary.
[2] Report not received at time of going to press.
[3] Reports received weekly.
[4] Reports received annually.
[5] Exclusive of Oklahoma City and Tulsa.

RECIPROCAL NOTIFICATIONS

Notifications regarding communicable diseases sent during the month of August 1927, to other State health departments by departments of health of certain States

Referred by—	Diphtheria	Dysentery	Poliomyelitis	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
California	----	----	----	----	----	2	----	----
Illinois	----	----	----	1	6	21	7	1
Minnesota	1	3	----	----	----	21	1	----
New York	1	----	1	1	1	----	5	----
Washington	1	----	----	----	----	----	----	----

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 94 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 30,110,000. The estimated population of the 89 cities reporting deaths is more than 29,470,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended September 10, 1927, and September 11, 1926

	1927	1926	Estimated expectancy
Cases reported			
Diphtheria:			
42 States	1,306	965	
94 cities	531	428	556
Measles:			
41 States	613	754	
94 cities	112	155	
Poliomyelitis:			
42 States	504	137	
Scarlet fever:			
42 States	1,131	963	
94 cities	304	325	304
Smallpox:			
42 States	133	155	
94 cities	20	7	18
Typhoid fever:			
42 States	1,138	1,488	
94 cities	172	259	220
Deaths reported			
Influenza and pneumonia:			
89 cities	378	304	
Smallpox:			
89 cities	0	0	

City reports for week ended September 10, 1927

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1918 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	75,333	0	1	1	0	0	1	1	2
New Hampshire:									
Concord	22,546	0	0	0	0	0	0	0	0
Manchester	83,007	0	2	0	0	0	0	0	1
Vermont:									
Barre	10,008	0	0	2	0	0	0	0	0
Burlington	24,089	0	0	0	0	0	1	0	1

City reports for week ended September 10, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND—con.									
Massachusetts:									
Boston	779,620	6	28	24	1	1	22	2	17
Fall River	128,993	0	1	0	0	0	0	0	1
Springfield	142,065	0	1	1	0	0	0	1	0
Worcester	190,757	0	4	1	0	0	0	0	0
Rhode Island:									
Pawtucket	68,760	0	0	0	0	0	0	0	0
Providence	267,918	0	3	5	0	0	0	0	2
Connecticut:									
Bridgeport	(1)		4						
Hartford	160,197	0	4	0	0	1	0	1	2
New Haven	178,927	0	2	1	0	0	3	0	2
MIDDLE ATLANTIC									
New York:									
Buffalo	538,016	2	11	14		1	1	1	4
New York	5,873,356	11	82	97	4	3	7	7	65
Rochester	316,786	0	4	3		0	0	2	2
Syracuse	182,003	0	4	1		0	5	1	1
New Jersey:									
Camden	128,642	0	2	14	0	0	0	0	2
Newark	452,513	3	6	7	1	0	2	5	11
Trenton	132,020	0	3	2	0	0	0	0	7
Pennsylvania:									
Philadelphia	1,979,364	4	33	31		1	0	10	28
Pittsburgh	631,563	2	12	12		2	16	3	15
Reading	112,707	0	2	2		0	1	1	0
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	409,333	0	7	4	0	0	2	0	7
Cleveland	936,485	11	22	37	1	0	4	12	6
Columbus	279,836	1	3	2	0	1	0	0	5
Toledo	287,380	3	7	4	1	0	1	0	2
Indiana:									
Fort Wayne	97,846	0	2	1	0	0	0	0	0
Indianapolis	358,819	2	5	5	0	0	0	4	5
South Bend	80,091	0	1	0	0	0	0	0	0
Terre Haute	71,071	0	0	1	0	0	0	0	1
Illinois:									
Chicago	2,995,239	22	50	45	5	2	4	12	34
Springfield	63,923	2	1	0	1	0	0	0	1
Michigan:									
Detroit	1,245,824	5	39	19	1	1	3	3	14
Flint	130,316	0	5	5	0	1	1	0	2
Grand Rapids	153,698	0	2	3	0	0	3	0	4
Wisconsin:									
Kenosha	50,891	1	0	0	0	0	0	1	0
Madison	46,385	1	1	0	0	0	1	0	0
Milwaukee	509,192	4	8	11	1	1	4	12	8
Racine	67,707	2	1	1	0	0	1	0	1
Superior	39,671	0	1	1	0	0	0	0	1
WEST NORTH CENTRAL									
Minnesota:									
Duluth	110,502	0	1	0	0	0	0	0	0
Minneapolis	425,435	8	17	7	0	0	0	0	5
St. Paul	246,001	0	13	1	0	0	2	0	5
Iowa:									
Davenport	52,469	0	1	2	0		0	0	
Des Moines	141,441	0	3	3	0		0	0	3
Sioux City	76,411	0	1	0	0		1	0	
Waterloo	36,771	0	0	1	0		1	0	
Missouri:									
Kansas City	367,481	1	3	3	0	0	0	1	5
St. Joseph	78,342	1	1	0	0	0	0	0	1
St. Louis	821,543	2	21	16	0	0	1	4	

(1) No estimate made.

(1) No estimate made.

City reports for week ended September 10, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
WEST NORTH CENTRAL—continued									
North Dakota:									
Fargo	26,403	0	0	0	0	0	0	0	0
Grand Forks	14,811	0	0	0	0	-------	0	0	-------
South Dakota:									
Aberdeen	15,036	0	0	0	0	-------	0	0	-------
Sioux Falls	30,127	0	0	0	0	-------	0	0	-------
Nebraska:									
Lincoln	60,941	0	0	0	0	0	0	1	1
Omaha	211,768	0	10	2	0	0	0	0	3
Kansas:									
Topeka	55,411	0	0	0	0	0	0	1	1
Wichita	88,367	1	1	2	0	0	0	0	1
SOUTH ATLANTIC									
Delaware:									
Wilmington	122,049	0	1	0	0	0	0	0	1
Maryland:									
Baltimore	796,296	2	14	26	3	0	1	1	7
Cumberland	33,741	0	1	0	0	0	0	0	0
Frederick	12,035	2	0	0	0	0	0	0	0
District of Columbia:									
Washington	497,906	0	5	6	0	0	0	0	5
Virginia:									
Lynchburg	30,395	0	1	2	0	0	0	0	1
Norfolk	[1]	1	0	0	0	0	0	0	1
Richmond	186,403	0	11	4	0	1	0	0	0
Roanoke	58,208	0	3	3	0	0	0	0	1
West Virginia:									
Charleston	49,019	0	2	0	0	0	0	-------	-------
Wheeling	56,208	0	1	0	0	0	1	0	1
North Carolina:									
Raleigh	30,371	0	2	2	0	1	1	0	0
Wilmington	37,061	0	1	0	0	0	0	0	1
Winston-Salem	69,031	1	2	3	0	0	2	5	0
South Carolina:									
Charleston	73,125	0	1	0	20	0	0	0	0
Columbia	41,225	0	1	2	0	1	3	0	1
Greenville	27,311	0	1	0	0	0	0	0	0
Georgia:									
Atlanta	[1]	0	5	7	3	1	0	1	4
Brunswick	16,809	0	0	0	0	0	0	0	0
Savannah	93,134	0	1	1	5	0	0	0	3
Florida:									
Miami	69,754	0	-------	3	0	0	0	1	0
St. Petersburg	26,847	-------	0	-------	-------	0	-------	-------	0
Tampa	94,743	0	1	4	0	0	0	0	2
EAST SOUTH CENTRAL									
Kentucky:									
Covington	58,309	0	0	2	0	0	0	0	1
Lexington	46,895	0	-------	0	0	0	1	0	2
Louisville	305,935	1	5	0	1	0	0	2	8
Tennessee:									
Memphis	174,532	0	4	5	0	1	1	1	3
Nashville	136,220	2	2	6	0	1	1	0	4
Alabama:									
Birmingham	205,670	0	4	5	2	0	0	1	3
Mobile	65,955	0	1	0	0	0	0	0	3
Montgomery	46,481	0	1	3	0	0	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	31,643	0	0	0	0	-------	0	1	-------
Little Rock	74,216	0	0	0	0	0	2	1	6
Louisiana:									
New Orleans	414,493	0	7	11	3	3	0	0	0
Shreveport	57,857	0	1	2	0	0	0	2	1

[1] No estimate made.

City reports for week ended September 10, 1927—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
WEST SOUTH CENTRAL—continued									
Oklahoma:									
Oklahoma City	(1)	0	2	2	6	1	0	0	5
Tulsa	124,478	0	-------	0	0	-------	0	0	-------
Texas:									
Dallas	194,450	-------	4	-------	-------	-------	-------	-------	-------
Galveston	48,375	0	0	0	0	0	0	0	0
Houston	164,954	0	3	2	0	0	0	0	2
San Antonio	198,069	0	1	3	0	0	0	0	3
MOUNTAIN									
Montana:									
Billings	17,971	0	0	0	0	0	0	0	0
Great Falls	29,883	0	0	0	0	0	1	0	0
Helena	12,037	0	0	0	0	0	0	0	0
Missoula	12,668	0	0	0	0	0	0	0	0
Idaho:									
Boise	23,042	0	0	0	0	0	0	5	0
Colorado:									
Denver	280,911	3	10	11	-------	1	2	2	6
Pueblo	43,787	0	3	0	0	0	0	0	1
New Mexico:									
Albuquerque	21,000	0	0	0	0	0	1	0	0
Utah:									
Salt Lake City	130,948	7	3	6	0	0	1	1	3
Nevada:									
Reno	12,665	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle	(1)	6	3	1	0	-------	0	1	-------
Spokane	108,807	2	1	0	0	-------	1	0	-------
Tacoma	104,455	-------	2	-------	-------	-------	-------	-------	-------
Oregon:									
Portland	282,383	4	4	3	0	0	2	0	0
California:									
Los Angeles	(1)	4	24	25	2	1	3	4	8
Sacramento	72,260	2	2	2	0	0	0	0	1
San Francisco	557,530	3	15	4	1	1	8	7	4

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND											
Maine:											
Portland	1	0	0	0	0	0	2	3	0	9	21
New Hampshire:											
Concord	0	0	0	0	0	0	0	0	0	0	5
Manchester	0	0	0	0	0	0	0	0	0	0	12
Vermont:											
Barre	0	1	0	0	0	2	0	0	0	0	3
Burlington	0	0	0	0	0	1	0	0	0	0	7
Massachusetts:											
Boston	15	13	0	0	0	7	4	6	1	18	208
Fall River	1	1	0	0	0	1	2	0	0	0	24
Springfield	2	1	0	0	0	1	0	3	0	10	34
Worcester	2	1	0	0	0	2	0	2	0	6	37

[1] No estimate made.

City reports for week ended September 10, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND—continued											
Rhode Island:											
Pawtucket	0	0	0	0	0	0	0	0	0	0	17
Providence	2	5	0	0	0	2	0	2	0	0	43
Connecticut:											
Bridgeport	2		0				1				
Hartford	2	1	0	0	0	1	1	0	0	0	31
New Haven	2	0	0	0	0	1	4	1	0	4	23
MIDDLE ATLANTIC											
New York:											
Buffalo	5	4	0	0	0	7	3	0	0	7	128
New York	28	27	0	0	0	[1] 95	47	41	1	98	1,174
Rochester	2	4	0	0	0	4	1	1	0	0	65
Syracuse	3	3	0	0	0	0	2	0	0	4	41
New Jersey:											
Camden	1	0	0	0	0	2	1	0	0	0	25
Newark	4	1	0	0	0	5	2	1	0	44	96
Trenton	1	0	0	0	0	4	0	0	0	2	36
Pennsylvania:											
Philadelphia	21	20	0	0	0	30	14	7	1	20	392
Pittsburgh	12	1	0	0	0	13	4	4	0	9	125
Reading	1	0	0	0	0	0	1	0	0	6	14
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	4	4	0	0	0	12	2	1	0	8	154
Cleveland	11	9	0	0	0	15	5	2	0	21	173
Columbus	3	7	0	0	0	4	1	0	0	16	59
Toledo	4	2	0	0	0	3	3	0	0	12	72
Indiana:											
Fort Wayne	1	0	0	0	0	0	2	0	0	1	21
Indianapolis	3	6	0	3	0	6	2	1	1	2	86
South Bend	1	0	0	0	0	0	0	0	0	5	9
Terre Haute	1	1	0	0	0	0	0	0	0	0	15
Illinois:											
Chicago	29	34	1	2	0	40	9	3	2	126	702
Springfield	1	1	0	0	0	1	1	1	0	0	22
Michigan:											
Detroit	26	10	1	0	0	18	6	2	0	62	260
Flint	4	5	0	0	0	2	1	0	0	14	25
Grand Rapids	3	3	1	0	0	2	0	0	0	6	32
Wisconsin:											
Kenosha	0	2	1	0	0	0	0	0	0	0	4
Madison	1	2	0	0	0	0	0	0	0	4	4
Milwaukee	10	7	0	0	0	12	0	0	0	31	135
Racine	2	6	0	0	0	0	1	0	0	8	8
Superior	1	3	0	0	0	1	0	0	0	0	10
WEST NORTH CENTRAL											
Minnesota:											
Duluth	4	4	0	0	0	1	0	1	0	3	17
Minneapolis	13	15	1	0	0	2	1	1	1	0	75
St. Paul	6	3	1	0	0	4	1	0	0	6	56
Iowa:											
Davenport	1	0	0	0			0	0		0	
Des Moines	3	4	0	0		1	0	1	1	3	43
Sioux City	0	1	0	0			0	0		4	
Waterloo	1	0	0	0			0	0		0	
Missouri:											
Kansas City	3	0	0	0	0	3	3	5	2	2	77
St. Joseph	1	0	0	5	0	0	1	0	0	0	41
St. Louis	9	13	0	0	0	9	7	7	1	6	178
North Dakota:											
Fargo	0	2	0	0	0	0	1	0	0	0	6
Grand Forks	1	0	0	0			0	0		0	

[1] Pulmonary tuberculosis only.

City reports for week ended September 10, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST NORTH CENTRAL—contd.											
South Dakota:											
Aberdeen	2	0	0	0	----	----	0	0	----	0	----
Sioux Falls	1	1	0	0	----	----	0	0	----	0	----
Nebraska:											
Lincoln	0	1	0	0	0	1	0	0	0	0	25
Omaha	2	3	0	1	0	6	1	0	0	1	56
Kansas:											
Topeka	1	0	0	0	0	2	0	1	0	10	21
Wichita	1	5	0	0	0	1	2	1	0	5	27
SOUTH ATLANTIC											
Delaware:											
Wilmington	1	2	0	0	0	2	0	0	0	3	26
Maryland:											
Baltimore	6	5	0	0	0	11	11	9	0	33	188
Cumberland	0	0	0	0	0	0	0	0	0	0	7
Frederick	0	0	0	0	0	0	0	0	0	0	4
District of Col.:											
Washington	4	8	0	1	0	6	5	3	1	5	114
Virginia:											
Lynchburg	0	0	0	0	0	4	1	0	0	5	13
Norfolk	0	1	0	0	0	1	1	1	0	0	----
Richmond	3	2	0	0	0	5	2	2	0	0	43
Roanoke	1	1	0	0	0	0	2	0	0	0	15
West Virginia:											
Charleston	0	3	1	0	0	1	2	3	0	4	16
Wheeling	2	0	0	0	0	2	1	0	0	3	22
North Carolina:											
Raleigh	0	0	0	0	0	0	0	0	0	2	11
Wilmington	0	0	0	0	0	0	1	0	0	1	9
Winston-Salem	0	2	0	0	0	2	2	2	0	6	31
South Carolina:											
Charleston	0	0	0	0	0	0	3	3	1	0	16
Columbia	0	2	0	0	0	0	1	0	0	1	9
Greenville	0	0	0	0	0	1	0	0	0	0	9
Georgia:											
Atlanta	4	6	0	0	0	4	5	8	1	4	67
Brunswick	0	0	0	0	0	0	0	0	0	0	4
Savannah	0	0	0	0	0	2	1	1	1	0	39
Florida:											
Miami	----	0	----	0	0	1	----	1	0	0	26
St. Petersburg	0	----	0	----	0	1	0	----	0	----	7
Tampa	0	1	0	0	0	0	0	0	0	0	33
EAST SOUTH CENTRAL											
Kentucky:											
Covington	1	3	0	0	0	1	0	0	0	0	20
Lexington	----	2	----	0	0	2	----	0	0	2	18
Louisville	2	3	0	1	0	3	6	1	0	2	83
Tennessee:											
Memphis	1	4	0	0	0	2	5	5	2	1	60
Nashville	2	1	0	0	0	4	6	5	0	0	53
Alabama:											
Birmingham	3	6	0	1	0	7	5	7	2	1	71
Mobile	1	1	1	0	0	0	1	0	0	0	25
Montgomery	0	1	0	0	0	0	1	4	0	3	----
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	1	0	0	0	----	----	0	0	----	1	----
Little Rock	1	5	0	0	0	1	2	0	1	0	----
Louisiana:											
New Orleans	1	2	0	0	0	17	5	3	0	0	139
Shreveport	1	1	0	0	0	1	2	0	0	0	24
Oklahoma:											
Oklahoma City	1	2	1	0	0	1	2	0	0	1	39
Tulsa	----	0	----	0	----	----	----	1	----	1	----

City reports for week ended September 10, 1927—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST SOUTH CENTRAL—continued											
Texas:											
Dallas	1		0				3				
Galveston	0	0	0	0	0	0	1	2	0	0	6
Houston	0	0	1	0	0	2	1	5	1	0	41
San Antonio	1	0	0	0	0	3	0	1	0	0	36
MOUNTAIN											
Montana:											
Billings	0	0	0	0	0	0	0	0	0	1	6
Great Falls	0	0	1	0	0	0	0	2	0	0	4
Helena	0	0	0	0	0	0	0	0	0	0	4
Missoula	0	0	0	0	0	0	1	0	0	0	7
Idaho:											
Boise	0	0	0	0	0	0	0	0	0	0	16
Colorado:											
Denver	4	3	2	0	0	11	3	1	1	6	91
Pueblo	0	0	0	0	0	0	1	4	0	0	11
New Mexico:											
Albuquerque	0	2	0	0	0	4	1	0	1	0	7
Utah:											
Salt Lake City	1	3	0	1	0	0	1	0	0	17	26
Nevada:											
Reno	0	0	0	0	0	0	0	0	0	0	3
PACIFIC											
Washington:											
Seattle	5	0	1	0			3	1		3	
Spokane	3	1	1	3			0	0		0	
Tacoma	2		1				0				
Oregon:											
Portland	3	0	3	5	0	4	2	0	0	0	54
California:											
Los Angeles	7	6	2	0	0	22	4	1	1	12	175
Sacramento	0	1	1	2	0	0	1	1	0	2	21
San Francisco	6	4	1	0	0	5	1	0	0	11	118

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
NEW ENGLAND									
Maine:									
Portland	0	0	0	0	0	1	1	1	3
Massachusetts:									
Boston	2	2	0	0	0	0	2	36	3
Fall River	0	0	0	0	0	0	1	2	0
Springfield	1	0	0	0	0	0	0	1	0
Worcester	0	0	0	0	0	0	0	2	0
Rhode Island:									
Providence	0	0	0	0	0	0	1	2	0
Connecticut:									
Hartford	0	0	0	0	0	0	1	1	0
New Haven	0	0	0	0	0	0	0	1	0

City reports for week ended September 10, 1927—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
MIDDLE ATLANTIC									
New York:									
Buffalo	1	0	0	0	0	0	1	0	0
New York	3	2	4	5	0	0	10	42	7
New Jersey:									
Newark	0	0	0	0	0	0	1	4	0
Pennsylvania:									
Philadelphia	0	1	0	0	0	1	1	3	0
Pittsburgh	0	0	0	0	0	1	0	3	1
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	0	0	0	0	0	0	0	3	1
Cleveland	0	0	0	0	0	1	1	9	0
Toledo	0	0	0	0	0	0	0	1	0
Indiana:									
Fort Wayne	0	0	0	0	0	0	0	1	0
South Bend	1	0	0	0	0	0	0	1	0
Illinois:									
Chicago	3	6	0	0	0	0	5	16	3
Michigan:									
Detroit	0	0	0	0	0	0	1	3	0
Grand Rapids	0	0	0	0	0	0	0	1	0
Wisconsin:									
Madison	0	0	0	0	0	0	0	1	0
Milwaukee	2	1	0	0	0	0	1	2	0
WEST NORTH CENTRAL									
Minnesota:									
Duluth	0	0	0	1	0	0	0	0	0
Iowa: [1]									
Des Moines	0	0	0	0	0	0	0	2	1
Waterloo	0	0	0	0	0	0	0	4	1
Missouri:									
Kansas City	0	0	1	1	0	0	0	5	1
Nebraska:									
Omaha	0	0	1	1	0	0	1	2	0
Kansas:									
Wichita	0	0	0	0	0	0	0	1	0
SOUTH ATLANTIC									
Maryland:									
Baltimore	0	0	2	2	1	1	2	0	0
District of Columbia:									
Washington	0	0	1	1	0	0	0	0	0
West Virginia:									
Wheeling	0	0	0	0	0	0	0	1	0
North Carolina:									
Raleigh	0	0	0	0	0	2	0	0	0
South Carolina:									
Charleston	0	0	0	0	2	1	0	0	0
Greenville	0	0	0	0	0	1	0	0	0
Georgia:									
Atlanta	0	0	0	0	1	1	0	0	0
Savannah [2] [3]	0	0	0	0	0	3	0	0	0
Florida:									
Tampa [3]	1	1	0	0	0	0	0	0	0
EAST SOUTH CENTRAL									
Kentucky:									
Louisville	0	0	0	0	0	0	0	1	0
Tennessee:									
Memphis	0	0	0	0	0	1	0	0	0
Nashville	0	0	0	0	0	1	0	1	0
Alabama:									
Birmingham	0	0	0	0	2	1	0	0	0
Montgomery	0	0	0	0	0	0	0	1	0

[1] Malta fever: 1 case at Davenport, Iowa.
[2] Dengue: 1 case at Savannah, Ga.
[3] Typhus fever: 5 cases and 1 death at Savannah, Ga., and 2 cases at Tampa, Fla.

City reports for week ended September 10, 1927—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
WEST SOUTH CENTRAL									
Arkansas:									
Little Rock	0	0	0	0	0	1	0	0	0
Louisiana:									
New Orleans	0	0	0	0	1	1	0	0	0
Shreveport	0	0	0	0	0	1	0	0	0
Oklahoma:									
Oklahoma City	0	0	0	2	0	1	0	0	0
Tulsa	1	0	0	0	0	0	0	0	0
Texas:									
Houston	0	0	0	0	0	1	0	0	1
MOUNTAIN									
Montana:									
Great Falls	0	0	0	0	0	0	0	1	0
Utah:									
Salt Lake City	0	0	0	0	0	0	0	1	0
PACIFIC									
Washington:									
Seattle	1	-------	0	-------	0	-------	1	0	-------
Oregon:									
Portland	0	1	0	1	0	0	0	0	0
California:									
Los Angeles	0	0	1	1	0	0	1	5	1
San Francisco	0	1	0	0	0	0	0	3	1

The following table gives the rates per 100,000 population for 101 cities for the five-week period ended September 10, 1927, compared with those for a like period ended September 11, 1926. The population figures used in computing the rates are approximate estimates as of July 1, 1926, and 1927, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had estimated aggregate populations of approximately 30,445,000 in 1926 and 30,966,000 in 1927. The 95 cities reporting deaths had nearly 29,785,000 estimated population in 1926 and nearly 30,296,000 in 1927. The number of cities included in each group and the estimated aggregate populations are shown in a separate table on the following page.

Summary of weekly reports from cities, August 7 to September 10, 1927—Annual rates per 100,000 population, compared with rates for the corresponding period of 1926 [1]

DIPHTHERIA CASE RATES

	Week ended—									
	Aug. 14, 1926	Aug. 13, 1927	Aug. 21, 1926	Aug. 20, 1927	Aug. 28, 1926	Aug. 27, 1927	Sept. 4, 1926	Sept. 3, 1927	Sept. 11, 1926	Sept. 10, 1927
101 cities	69	90	68	80	65	81	73	[2] 84	75	[3] 92
New England	31	70	47	111	50	86	26	88	38	[4] 99
Middle Atlantic	62	97	59	94	56	78	59	77	53	90
East North Central	101	94	87	85	76	81	99	87	78	[5] 91
West North Central	56	67	83	44	81	54	67	69	75	[6] 62
South Atlantic	48	82	60	62	61	89	69	[2] 89	136	109
East South Central	57	25	21	51	57	61	41	51	103	107
West South Central	26	92	64	75	34	96	60	164	86	[7] 91
Mountain	73	180	146	54	73	135	91	117	173	153
Pacific	104	107	62	60	91	94	134	73	91	[8] 89

MEASLES CASE RATES

101 cities	59	28	44	32	30	25	25	[2] 21	27	[3] 19
New England	68	63	52	84	38	58	33	58	35	[4] 73
Middle Atlantic	33	28	27	35	15	24	17	18	11	16
East North Central	84	19	72	13	43	13	31	11	20	[5] 15
West North Central	67	22	28	22	20	16	10	16	10	[6] 8
South Atlantic	80	14	35	27	15	31	9	[2] 18	19	14
East South Central	31	15	36	5	36	25	31	10	16	10
West South Central	4	21	9	42	4	17	0	42	4	[7] 10
Mountain	64	36	18	18	27	27	36	9	100	36
Pacific	94	60	78	71	94	52	91	42	158	[8] 33

SCARLET FEVER CASE RATES

101 cities	51	58	48	50	55	54	51	[2] 57	58	[3] 53
New England	68	93	73	51	54	81	59	60	80	[4] 62
Middle Atlantic	30	39	29	31	32	38	25	38	32	30
East North Central	55	73	46	78	55	61	58	80	61	[5] 66
West North Central	119	75	119	64	133	62	131	69	93	[6] 93
South Atlantic	30	33	39	42	58	63	37	[2] 60	56	60
East South Central	47	36	36	20	62	87	57	76	109	97
West South Central	21	59	17	50	26	59	26	59	47	[7] 40
Mountain	36	117	36	81	64	63	82	63	73	54
Pacific	86	63	78	42	75	37	70	34	88	[8] 33

SMALLPOX CASE RATES

101 cities	7	4	2	5	4	5	2	[2] 4	2	[3] 3
New England	0	0	0	0	0	0	0	0	0	[4] 0
Middle Atlantic	0	0	1	0	0	0	0	0	0	0
East North Central	1	5	2	7	7	6	0	7	2	[5] 3
West North Central	4	4	4	10	0	4	0	2	2	[6] 12
South Atlantic	11	5	6	4	9	0	9	[2] 0	2	2
East South Central	26	0	5	25	0	25	10	0	0	10
West South Central	21	0	0	4	9	0	4	0	0	[7] 0
Mountain	73	9	0	18	0	27	0	36	0	9
Pacific	32	24	5	13	13	31	13	18	16	[8] 14

[1] The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1926 and 1927, respectively.
[2] Greenville, S. C., not included.
[3] Pawtucket, R. I., Bridgeport, Conn., Hartford, Conn., Fort Wayne, Ind., Waterloo, Iowa, Dallas, Tex., and Tacoma, Wash., not included.
[4] Pawtucket, R. I., Bridgeport, Conn., and Hartford, Conn., not included.
[5] Fort Wayne, Ind., not included.
[6] Waterloo, Iowa, not included.
[7] Dallas, Tex., not included.
[8] Tacoma, Wash., not included.

Summary of weekly reports from cities, August 7 to September 10, 1927—Annual rates per 100,000 population, compared with rates for the corresponding period of 1926—Continued

TYPHOID FEVER CASE RATES

	Week ended—									
	Aug. 14, 1926	Aug. 13, 1927	Aug. 21, 1926	Aug. 20, 1927	Aug. 28, 1926	Aug. 27, 1927	Sept. 4, 1926	Sept. 3, 1927	Sept. 11, 1926	Sept. 10, 1927
101 cities	35	25	41	37	40	31	40	[2] 32	45	[3] 30
New England	17	30	17	30	19	33	12	21	17	[4] 48
Middle Atlantic	24	15	34	20	39	21	34	28	34	27
East North Central	20	14	17	19	20	11	20	15	20	[5] 7
West North Central	24	22	48	38	42	20	42	10	50	[6] 32
South Atlantic	99	45	93	82	56	58	91	[2] 71	104	58
East South Central	140	97	186	219	233	204	176	183	284	112
West South Central	47	88	43	80	39	75	43	55	39	[7] 56
Mountain	73	36	73	27	18	45	9	54	18	63
Pacific	29	10	24	31	38	21	46	8	27	[8] 8

INFLUENZA DEATH RATES

95 cities	1	3	3	4	3	5	3	[2] 4	4	[9] 4
New England	0	2	0	2	0	2	0	2	0	[4] 3
Middle Atlantic	1	2	1	2	3	2	2	3	4	3
East North Central	0	2	3	2	3	3	4	5	4	[5] 4
West North Central	2	6	2	0	8	2	4	4	0	0
South Atlantic	0	4	2	6	2	11	0	[2] 7	0	6
East South Central	10	5	0	10	0	15	16	5	0	10
West South Central	13	13	26	30	4	22	9	13	18	[7] 16
Mountain	0	0	0	0	18	9	9	18	36	9
Pacific	0	3	7	0	0	7	0	0	0	[8] 7

PNEUMONIA DEATH RATES

95 cities	50	55	54	45	47	46	51	[3] 56	51	[9] 62
New England	31	77	40	49	33	51	50	49	40	[4] 68
Middle Atlantic	62	57	58	47	56	55	59	72	65	67
East North Central	35	41	35	35	37	34	34	51	37	[5] 60
West North Central	25	44	49	25	42	31	36	23	30	44
South Atlantic	57	72	87	53	59	37	64	[2] 42	44	50
East South Central	52	66	36	66	47	66	52	46	41	112
West South Central	106	56	66	69	71	65	49	82	97	[7] 63
Mountain	82	63	82	36	73	36	64	54	64	90
Pacific	39	55	78	72	21	62	78	55	57	[8] 48

[2] Greenville, S. C., not included.
[3] Pawtucket, R. I., Bridgeport, Conn., Hartford, Conn., Fort Wayne, Ind., Waterloo, Iowa, Dallas, Tex., and Tacoma, Wash., not included.
[4] Pawtucket, R. I., Bridgeport, Conn., and Hartford, Conn., not included.
[5] Fort Wayne, Ind., not included.
[6] Waterloo, Iowa, not included.
[7] Dallas, Tex., not included.
[8] Tacoma, Wash., not included.
[9] Pawtucket, R. I., Bridgeport, Conn., Hartford, Conn., Fort Wayne, Ind., Dallas, Tex., and Tacoma, Wash., not included.

Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1926 and 1927, respectively

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1926	1927	1926	1927
Total	101	95	30,443,800	30,966,700	29,783,700	30,295,900
New England	12	12	2,211,000	2,245,900	2,211,000	2,245,900
Middle Atlantic	10	10	10,457,000	10,567,000	10,457,000	10,567,000
East North Central	16	16	7,650,200	7,810,600	7,650,200	7,810,600
West North Central	12	10	2,585,500	2,626,600	2,470,600	2,510,000
South Atlantic	21	20	2,799,500	2,878,100	2,757,700	2,835,700
East South Central	7	7	1,003,300	1,023,500	1,003,300	1,023,500
West South Central	8	7	1,213,800	1,243,300	1,181,500	1,210,400
Mountain	9	9	572,100	580,000	572,100	580,000
Pacific	6	4	1,946,400	1,991,700	1,475,300	1,512,800

FOREIGN AND INSULAR

PLAGUE ON VESSELS

Steamship "Capafric"—At Duala, French Cameroons, from Nigeria—August 23, 1927.—Three cases of plague with one death were reported on the steamship *Capafric*, from Nigeria, arriving at Duala, French Cameroons, August 23, 1927.

Steamship "Elcano"—At Piraeus, Greece, from Constanza, Rumania, August 19, 1927.—The steamship *Elcano* arrived at Port Said, Egypt, August 22, 1927, with history of a case of plague disembarked at Piraeus, Greece, August 19, 1927. The case occurred in a member of the personnel of the ship. The itinerary of the vessel showed communication with Alexandria, Egypt, August 2 to 4; Constanza, August 8 to 15; Piraeus, August 18 to 20, 1927.

Steamship "Madonna"—At Dakar, Senegal, from ports south—August 24, 1927.—A case of plague occurring in a European passenger was reported landed from the steamship *Madonna* arriving August 24, 1927, at Dakar, Senegal, from ports south and destined for Marseilles, France.

THE FAR EAST

Report for week ended September 3, 1927.—The following report for the week ended September 3, 1927, was transmitted by the Eastern Bureau of the health section of the secretariat of the League of Nations, located at Singapore, to the headquarters at Geneva:

Maritime towns	Plague		Cholera		Smallpox	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Egypt: Suez	1	0	0	0	0	0
Iraq: Basra	0	0	31	21	1	1
Persia: Mohammerah	0	0	11	5	0	0
British India:						
Bombay		1		1	2	3
Madras		0		24	2	0
Vizagapatam		0		0	1	1
Calcutta		0		10	4	2
Bassein		1		0	0	0
Rangoon		0		0	2	1
Ceylon: Colombo	1	0	0	0	0	0
Straits Settlements: Singapore	1	0	0	0	0	0
Siam: Bangkok	0	0	1	0	0	0
Dutch East Indies:						
Banjermasin	0	0	0	0	26	1
Surabaya	0	0	0	0	1	0
French Indo-China:						
Saigon and Cholon	1	0	1	0	1	0
Turane	0	0	2	2	0	0
Philippine Islands: Manila	0	0	1	0	0	0
China:						
Canton	0	0	10	6	0	0
Amoy	0	0	18		0	0
Shanghai	0	0		23	0	0
Hong Kong	0	0	0	0	2	1
Macao	0	0	1	0	0	0

Telegraphic reports from the following maritime towns indicated that no case of plague, cholera, or smallpox was reported during the week:

ASIA

Aden Protectorate.—Aden, Kamaran, Perim.
Arabia.—Bahrein.
Persia.—Bender-Abbas, Bushire, Lingah.
India.—Karachi, Chittagong, Cochin, Tuticorin, Negapatam, Moulmein.
Portuguese India.—Nova Goa.
Federated Malay States.—Port Swettenham.
Straits Settlements.—Penang.
Dutch East Indies.—Batavia, Pontianak, Semarang, Cheribon, Balikpapan, Padang, Belawan-Deli, Tarakan, Palembang, Samarinda, Menado, Makassar.
Sarawak.—Kuching.
British North Borneo.—Sandakan, Jesselton, Kudat, Tawao.
Portuguese Timor.—Dilly.
Philippine Islands.—Iloilo, Jolo, Cebu, Zamboanga.
French Indo-China.—Haïphong.
China.—Tientsin, Tsingtao.
Wei-hai-wei.
Formosa.—Keelung, Takao.
Chosen.—Chemulpo, Fusan.
Manchuria.—Yingkow, Antung, Harbin, Mukden, Changchun.
Kwantung.—Port Arthur, Dairen.
Japan.—Nagasaki, Yokohama, Niigata, Shimonoseki, Moji, Tsuruga, Kobe, Osaka, Hakodate.

AUSTRALASIA AND OCEANIA

Australia.—Adelaide, Melbourne, Sydney, Brisbane, Rockhampton, Townville, Port Darwin, Broome, Fremantle, Carnarvon, Thursday Island, Cairns, Port Moresby.
New Guinea.—Port Moresby.
New Britain Mandated Territory.—Rabaul and Kokopo.
New Zealand.—Auckland, Wellington, Christchurch, Invercargill, Dunedin.
Western Samoa.—Apia.
New Calidonia.—Nouméa.
Fiji.—Suva.
Hawaii.—Honolulu.
Society Islands.—Papeete.

AFRICA

Egypt.—Alexandria, Port Said.
Anglo-Egyptian Sudan.—Port Sudan, Suakin.
Eritrea.—Massaua.
French Somaliland.—Djibouti.
British Somaliland.—Berbera.
Italian Somaliland.—Mogadiscio.
Kenya.—Mombasa.
Zanzibar.—Zanzibar.
Tanganyika.—Dar-es-Salaam.
Seychelles.—Victoria.
Portuguese East Africa.—Mozambique, Beira, Lourenço-Marques.
Union of South Africa.—East London, Port Elizabeth, Cape Town, Durban.
Reunion.—Saint Denis.
Mauritius.—Port Louis.
Madagascar.—Majunga, Tamatave, Diégo-Suarez.

AMERICA

Panama.—Colon, Panama.

Reports had not been received in time for publication from:

Dutch East Indies.—Sabang.
Union of Socialist Soviet Republics.—Vladivostok.

Belated information:

Week ended August 20.—*Pondicherry* and *Karikal*, nil.

Movement of infected ships

Kobe.—The mail steamers *Buckeye State* and *Glenapp* arrived during the week ended September 3 from Shanghai infected with cholera.

Hong Kong.—The mail-steamer *Morea* arrived from Shanghai infected with cholera on September 2.

The coolie steamer *Kutsang* arrived on September 8 from Amoy infected with cholera.

Singapore.—The pilgrim ship *Armanestan* arrived September 6 from Jeddah infected with smallpox.

ARGENTINA

Plague—Entre Rios.—During the week ended August 13, 1927, one case of plague was reported in Argentina, occurring in the interior of the Province of Entre Rios.

CANADA

Communicable diseases—Week ended September 10, 1927.—The Canadian Ministry of Health reports cases of certain communicable diseases in six Provinces of Canada for the week ended September 10, 1927, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Manitoba	Saskatchewan	Alberta	Total
Influenza	2			1	3		6
Poliomyelitis						[1] 42	42
Smallpox					33	1	34
Typhoid fever	3	10	30	2	14	3	62

[1] These cases are chiefly about city of Edmonton, Alberta.

Communicable diseases—Province of Ontario—August, 1927 (comparative).—During the month of August, 1927, communicable diseases were reported in the Province of Ontario, Canada, as compared with occurrence during the corresponding period of the preceding year, as follows:

Disease	1927		1926	
	Cases	Deaths	Cases	Deaths
Cerebrospinal meningitis		5	6	2
Chancroid	3		1	
Chicken pox	169		136	
Diphtheria	175	9	158	13
Dysentery	1	1		
Erysipelas	3			
German measles	21		24	
Gonorrhea	128		107	
Influenza	2	1		
Lethargic encephalitis		1		
Measles	205		320	
Mumps	52		2	
Pneumonia		75		67
Poliomyeltis	3		5	
Scarlet fever	123	1	106	
Septic sore throat	2			
Smallpox	69		17	
Syphilis	90		48	
Tetanus	1			
Tuberculosis	92	42	95	59
Typhoid fever	141	2	43	2
Whooping cough	297	3	256	8

Smallpox.—Smallpox was reported present in nine localities, the greatest number of cases being reported at Ottawa, viz, 38, and the lowest number, viz, 1 case, at Sarnia.

Communicable diseases—Quebec—Week ended September 10, 1927.—The bureau of health of the Province of Quebec reports cases of certain communicable diseases for the week ended September 10, 1927, as follows:

Disease	Cases	Disease	Cases
Chicken pox	2	Tuberculosis	19
Diphtheria	35	Typhoid fever	30
Measles	1	Whooping cough	12
Scarlet fever	34		

Epidemic poliomyelitis—Alberta—August-September, 1927.—Poliomyelitis in epidemic form has been reported in Alberta, Canada, as follows: *Calgary*—September 4 to 10, 1927, 4 cases, of which 1 case was stated to have been from a country district. *Edmonton*—One case reported in May, 1927; in July, 4 cases; in August, 51 cases; September 1 to 9, 14 cases; total for Edmonton, 70 cases. Under date of September 9, 1927, 22 cases were stated to exist in other localities in the Province of Alberta, mainly in the vicinity of Edmonton.

Typhoid fever—Montreal—January 2-September 17, 1927.—The following table gives the cases of typhoid fever and deaths from this disease reported at Montreal, Quebec, Canada, since January 1, 1927:

Week ended—	Cases	Deaths	Week ended—	Cases	Deaths
Jan. 8, 1927	3	1	May 21, 1927	770	28
Jan. 15, 1927	4	3	May 28, 1927	353	38
Jan. 22, 1927	1	2	June 4, 1927	239	37
Jan. 29, 1927	3	1	June 11, 1927	128	36
Feb. 5, 1927	1	0	June 18, 1927	86	----
Feb. 12, 1927	0	0	June 25, 1927	75	23
Feb. 19, 1927	1	2	July 2, 1927	66	21
Feb. 26, 1927	1	1	July 9, 1927	52	10
Mar. 5, 1927	9	1	July 16, 1927	39	4
Mar. 12, 1927	203	4	July 23, 1927	22	9
Mar. 19, 1927	383	14	July 30, 1927	23	10
Mar. 26, 1927	568	22	Aug. 6, 1927	16	5
Apr. 2, 1927	649	48	Aug. 13, 1927	20	5
Apr. 9, 1927	386	40	Aug. 20, 1927	14	4
Apr. 16, 1927	175	38	Aug. 27, 1927	8	3
Apr. 23, 1927	125	43	Sept. 3, 1927	27	----
Apr. 30, 1927	105	23	Sept. 10, 1927	17	----
May 7, 1927	106	19	Sept. 17, 1927	13	2
May 14, 1927	367	16			

CZECHOSLOVAKIA

Communicable diseases—July, 1927.—During the month of July, 1927, communicable diseases were reported in the Republic of Czechoslovakia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax	3	----	Puerperal fever	41	16
Cerebrospinal meningitis	19	8	Scarlet fever	884	20
Diphtheria	335	20	Trachoma	263	----
Dysentery	47	3	Typhoid fever	614	32
Malaria	120	----	Typhus fever	6	----
Paratyphoid fever	11	----			

GREECE

Plague—Athens.—A case of plague was reported at Athens, Greece, August 29, 1927.

RUMANIA

Poliomyelitis—Bucharest, city and Province—June-September, 1927.—Epidemic poliomyelitis was reported present at Bucharest, Rumania, in June, 1927, and from that period to September 6, a total of 226 cases in Bucharest and 50 cases in the Province, with a mortality of 15–16 per cent, was reported. There were 12 cases reported in adults over 20 year of age.

UNION OF SOUTH AFRICA

Plague—Orange Free State—July 31–August 6, 1927.—During the week ended August 6, 1927, a fatal case of plague was reported in Rouxville District, Orange Free State. The case occurred in a native and on a farm.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended September 30, 1927 [1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
China:				
Amoy	Aug. 7–13	5	2	
Shanghai	Aug. 7–20		13	In International Settlement and French Concession, Chinese and foreign.
Swatow	July 31–Aug. 6	42		Aug. 7–20, 1927: Reported prevalent.
India				July 17–30, 1927: Cases, 23,526; deaths, 12,148.
Bombay	July 24–Aug. 6	76	39	
Madras	Aug. 14–20	110	61	
Indo-China (French):				
Saigon	July 16–21	1		
Iraq:				
Basra	July 17–23	5	5	
Do	July 24–30	29	18	
Do	July 31–Aug. 6	48	35	
Do	Aug. 7–13	125	108	
Do	Aug. 14–20	99	79	
Do	Aug. 21–27	47	19	
Persia:				
Abadan	July 24–30	122	103	
Do	July 31–Aug. 6	66	58	
Do	Aug. 7–13	27	22	
Ahwaz	July 31–Aug. 6	12	6	
Do	Aug. 7–13	8	7	
Minab	——do		23	
Mohammerah	July 17–23			Present.
Do	July 24–30	52	37	
Do	July 31–Aug. 6	34	26	
Do	Aug. 7–13	16	12	
Do	Aug. 14–20	69	60	
Do	Aug. 21–27	23	20	
Siam				July 24–30, 1927: Cases, 26; deaths, 20. Apr. 1–July 30, 1927: Cases, 626; deaths, 430.
Bangkok	July 24–30		1	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received During Week Ended September 30, 1927—Continued

PLAGUE

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	Aug. 21-31	1		
Oran	do	4	3	
Argentina:				
Entre Rios	Aug. 7-13	1		
British East Africa:				
Kenya—				
Mombasa	July 24-30	1	1	Imported from Fort Hall.
Tanganyika Territory	July 24-Aug. 6		10	
China:				
Tientsin	Aug. 14-20	2		
Greece:				
Athens	Aug. 29	1		
Patras	Aug. 31-Sept. 4	2		
India:				
Bombay	July 24-Aug. 3	7	7	
Madras Presidency	July 24-30	68	27	
Rangoon	July 31-Aug. 6	5	5	
Java:				
East Java and Madura—				
Surabaya	July 17-23	6	6	June 19-25, 1927: Cases, 4; deaths 3. Out of date.
Senegal:				
Baol District	Aug. 22-28	23	13	In two Cantons.
Cayor District	do	227	166	Greatest prevalence, Tivaouane District.
Dakar	do	10	7	
Rufisque	do	3	3	
Siam				Apr. 1-July 30, 1927: Cases, 10; deaths, 7.
Union of South Africa:				
Orange Free State—				
Rouxville District	July 31-Aug. 6	1	1	Native. On farm.
On Vessels:				
S. S. Capafric	Aug. 23	3	1	At Duala, French Cameroons, from Nigeria.
S. S. Elcano	Aug. 19	1		At Piraeus, Greece, from Constanza, Rumania, Aug. 15, 1927 at Port Said Aug. 22, 1927.
S. S. Madonna	Aug. 24	1		At Dakar, Senegal; from ports south; destination Marseille, France. In European passenger.

SMALLPOX

British South Africa:				
Northern Rhodesia	Aug. 6-12	3		
Canada	Sept. 4-10			Cases, 34.
Alberta	do	1		
British Columbia—				
Vancouver	Aug. 29-Sept. 4	2		
Ontario				Aug. 1-31, 1927: Cases, 69; corresponding period, year 1926, 17 cases.
Ottawa	August, 1927	38		
Do	Sept. 10-17	10		
Saskatchewan	Sept. 4-10	33		
Moose Jaw	do	9		
China:				
Foochow	Aug. 7-13			Present.
Hong Kong	do	1	1	
Great Britain:				
England and Wales	Aug. 21-Sept. 3	277		
Leeds	Aug. 28-Sept. 3	3		
Scotland—				
Dundee	do	1		
Greece:				
Saloniki	Aug. 1-15		2	
India				July 17-30, 1927: Cases, 5,338; deaths, 1,411.
Bombay	July 24-Aug. 6	23	13	
Rangoon	July 31-Aug. 6	5	1	
Indo-China (French):				
Saigon	July 15-21	1		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received During Week Ended September 30, 1927—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Poland				July 18–Aug. 6, 1927: Cases, 3.
Siam				July 24–30, 1927: Cases, 4: deaths, 2. Apr. 1–July 30, 1927: Cases, 172; deaths, 42.
Syria:				
Damascus	Aug. 11–20	1		
Union of South Africa:				
Cape Province—				
Mount Ayliffe District	July 31–Aug. 6			Outbreaks.

TYPHUS FEVER

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	Aug. 21–31	2		
Oran	do	1		
Chosen:				
Chemulpo	July 1–31	1		
Gensan	do	2		
Seoul	do	2	1	
Czechoslovakia	do	6		
Egypt:				
Cairo	Apr. 23–May 20	7	4	
Greece:				
Athens	July 1–31	1		
Mexico:				
Mexico City	Aug. 28–Sept. 3	9		Including municipalities in Federal District.
Poland				July 24–Aug. 6, 1927: Cases, 36; deaths, 4.
Union of South Africa:				
Cape Province				July 31–Aug. 6, 1927: Outbreaks in four districts.
Natal				July 31–Aug 6, 1927: Outbreaks in one district.
Transvaal—				
Johannesburg	Aug. 14–20	1		

YELLOW FEVER

Place	Date	Cases	Deaths	Remarks
Senegal:				
Dakar	Sept. 17			Present.

Reports Received from June 25 to September 23, 1927 [1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
China:				
Amoy	May 22–Aug. 6	6	1	
Canton	May 1–July 23	16	7	
Foochow	July 24–30			Present.
Hong Kong	July 17–23	2	2	
Kulangsu	June 21	1		
Shanghai	June 19–25	2		
Do	July 31–Aug. 6		3	In international settlement and French concession.
Swatow	May 15–July 30	96	13	
India	Apr. 17–July 16			Cases, 102,184; deaths, 50,008.
Bombay	May 8–July 23	27	11	
Calcutta	May 8–Aug. 6	580	355	
Karachi	May 29–June 4	1	1	
Madras	June 19–Aug. 13	568	272	
Rangoon	May 8–July 30	17	13	
India, French Settlements in	Mar. 30–June 30	15	8	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 25 to September 23, 1927—Continued

CHOLERA—Continued

Place	Date	Cases	Deaths	Remarks
Indo-China (French)	Apr. 1-July 10			
Annam	do	1,467		Cases, 11,145.
Cambodge	do	235		
Cochin-China	do	1,354		
Saigon	June 4-July 14	9	4	
Tonkin	Apr. 1-June 30	8,089		
Iraq:				
Baghdad	July 24-30	29	18	
Basra	July 25-Aug. 13	172	140	
Japan:				
Yokohama	July 31-Aug. 6	1	1	
Persia:				
Abadan	July 19-31		166	
Mohammerah	do		61	
Nasseri	do		10	
Philippine Islands:				
Manila	July 17-23	1		
Bulacan Province	June 7-July 8	3	2	
Leyte Province—				
Barugo	June 29	1	1	
Carigara	June 23	1	1	Final diagnosis not received.
Palo	May 18	1		
Siam	May 1-July 23			Cases, 226; deaths, 130.
Bangkok	do	43	12	
On vessel:				
S. S. Adrastus	Reported Aug. 6	1	1	At Yokohama, Japan.
S. S. War Mehtar (oil tanker).	Aug. 4	1	1	At Saffagha, Egypt.

PLAGUE

Argentina	Jan. 1-Aug. 2			Cases, 80; deaths, 44.
Buenos Aires	Apr. 10-May 7	4	3	
Cordoba	Jan. 11-Aug. 6	52	29	
Corrientes	June 1	1	1	
Entre Rios	Mar. 29-Aug. 2	7	1	
Santa Fe	Apr. 28-May 16	4	3	
Territory—				
Chaco—				
Barranqueras	May 29	2	2	
Formosa	June 25	3	2	
Pampa	July 27-Aug. 2	4		
Rio Negro	Aug. 6	1		
City—				
Meron	Reported July 14			Present.
Rosario	May 7	1	1	
Santa Fe	May 16	4	2	
Azores:				
Rebeira Grande	June 12-18			9 miles from port.
St. Michaels Island	May 15-July 30	3		
British East Africa:				
Kenya	Apr. 24-July 2	60	14	
Nairobi	May 22-28	6		
Tanganyika	Mar. 29-May 28		37	
Uganda	Jan. 1-Feb. 28	138	121	
Do	Mar. 27-June 18	366	300	
Canary Islands:				
Laguna district—				
Tejina	June 17	1		
Ceylon:				
Colombo	May 1-July 2	17	11	Plague rats, 4.
China:				
Amoy	July 3-23			Present in surrounding country.
Ecuador:				
Guayaquil	June 1-July 31			Rats taken, 48,290; found infected, 34.
Egypt	May 1-July 8			Cases, 7; deaths, 2.
	Aug. 6-12			Cases, 5.
Alexandria	June 4-10	1		
Biba	do	1		At Nama.
Beni-Souef	June 4-July 13	5	2	
Dakhalia	June 24-July 9	6	1	
Minia	Aug. 8-9	4		
Port Said	June 24-July 21	4	1	
Tanta district	June 4-10	1		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 25 to September 23, 1927—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Greece	May 1-June 30	4	3	
Athens	June 1-Aug. 6	2		Including Piraeus.
Mytilene	Aug. 9	1		
Patras	May 30-Aug. 6	6	1	
Hawaii Territory:				
Hamakua	July 15			1 plague rodent.
Honokaa	May 17-23	2	2	
Kukuihaele	Aug. 12-17	1	1	Plague rodent.
Paauilo	July 26-Aug. 1		4	
India	Apr. 17-July 16			Cases, 21,814; deaths, 8,324.
Bombay	May 8-July 23	80	67	
Madras	May 1-July 23	353	167	
Rangoon	May 8-July 30	48	44	
Indo-China (French)	Apr. 1-July 10	32		
Kwang-Chow-Wan	May 21-July 10	68		
Iraq:				
Baghdad	Apr. 8-May 28	12	1	
Java:				
Batavia	May 1-July 23	182	183	Provinces.
East Java and Madura	May 22-July 16	28	27	
Pasoeroean Residency	May 9			Outbreak reported at Nagdiwono.
Surabaya	Apr. 17-May 7	24	24	
Madagascar				Mar. 16-Apr. 30, 1927: Cases, 256; deaths, 135.
Province—				
Ambositra	Mar. 16-July 15	94	87	
Antisrabe	Mar. 16-May 15	8	8	
Miarinarivo (Itasy)	Mar. 16-July 15	65	59	
Moramanga	May 16-July 15	24	23	
Tananarive	Mar. 16-July 15	221	194	
Tananarive Town	Mar. 16-June 30	22	20	
Nigeria	Mar. 1-May 31	228	177	
Peru	Apr.-May 31			Cases, 22; deaths, 8.
Departments—				
Ica	Apr. 1-30	1		
Lambayeque	do	1		
Libertad	Apr. 1-May 31	7	4	
Lima	do	13	4	
Lima City	Apr. 1-30	5	1	
Senegal	May 23-Aug. 21			Cases, 656; deaths, 415.
Baol	June 2-July 31	45	23	
Cayor Frontier	July 4-31	126	74	
Dakar	June 20-Aug. 21	116	75	
Facel	July 6	17	8	
Guindel	June 20-26	11	2	
M'Bour	July 6-10	28	23	
Medina	June 13-19	2	2	
Pout	July 4-10	1		
Rufisque	May 23-Aug. 21	204	152	
Thies district	May 23-July 30	27	9	
Tivaouane	June 2-July 17	50	32	
Siam	Apr. 1-July 23			Cases, 10; deaths, 7.
Bangkok	May 8-June 11	2	1	
Syria:				
Beirut	June 11-July 10	3		
Tunisia	Apr. 21-July 10	144		
Tunis	July 25-Aug. 1	1		
Turkey:				
Constantinople	May 13-19	1		
Union of South Africa:				
Cape Province—				
Maraisburg district	May 1-14	2	2	Native.
Orange Free State—				
Edenburg district	July 17-26	3	3	Natives; on farm.
Rouxville district	July 24-30	1	1	
On vessel:				
S. S. Avoroff	June 24-30	1		On Greek warship at port of Athens.
S. S. Ransholm	Aug. 5	3		At Gavle, Sweden, from Rufisque, Senegal. Originally reported in quarantine at Gavle in July.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 25 to September 23, 1927—Continued

SMALLPOX

Place	Date	Cases	Deaths	Remarks
Algeria	Apr. 21–July 10			Cases, 648.
Algiers	May 11–June 30	8		
Oran	May 21–Aug. 10	47		
Arabia:				
Aden	July 17–Aug. 1	2	1	
Brazil:				
Porto Alegre	July 1–31	5		
Rio de Janeiro	May 22–Aug. 20	12	8	
British East Africa:				
Kenya	Apr. 24–May 14	7	14	
Tanganyika	Mar. 29–June 18	2	22	
Zanzibar	Apr. 1–May 31	19	7	
British South Africa:				
Northern Rhodesia	Apr. 30–Aug. 5	108	2	
Canada	June 5–Sept. 3			Cases, 413.
Alberta	June 12–Sept. 3			Cases, 96.
Calgary	June 12–Aug. 27	9		
British Columbia—				
Vancouver	May 23–29	2		
Manitoba	June 5–Sept. 3			Cases, 31.
Winnipeg	June 12–Aug. 27	17		
Ontario	June 5–Aug. 27			Cases, 177.
Ottawa	June 12–Sept. 10	122		
Sarnia	Aug. 7–13	1		
Toronto	June 19–July 23	9		
Quebec	June 19–Aug. 27	15		
Saskatchewan	June 12–Sept. 3			Cases, 71.
Moose Jaw	Aug. 14–20	5		
Regina	July 17–Aug. 27	10		
Ceylon	May 1–7			Cases, 3; deaths, 1.
Colombo	July 31–Aug. 6	1	1	
China:				
Amoy	May 8–28	1		
Do	July 3–16			Present in surrounding country.
Antung	July 4–31	3		
Cheefoo	May 8–14			Present.
Foochow	May 8–July 16			Do.
Hong Kong	May 8–July 30	19	18	
Manchuria—				
Anshan	May 22–28	1		
Changehun	May 15–July 30	8		
Dairen	May 2–July 3	10	5	
Fushun	May 15–July 30	10		
Harbin	June 13–July 10	4		
Kai-Yuan	July 3–9	2		
Mukden	May 22–July 30	6		
Pensihu	July 3–9	1		
Ssupingkai	May 8–July 9	3		
Tientsin	May 8–July 30	18		
Chosen	Feb. 1–May 31			Cases, 451; deaths, 195.
Chinnampo	Apr. 1–May 31	2		
Fusan	Apr. 1–30	1		
Gensan	May 1–31	1		
Seishin	Apr. 1–30	1		
Curacao	May 29–June 4	1		Alastrim.
Ecuador:				
Guayaquil	June 1–30	2		
Egypt	May 7–July 29			Cases, 21; deaths, 3.
Alexandria	May 21–June 17	4	1	
Cairo	Jan. 22–Apr. 15	14	3	
France	Apr. 1–June 30			Cases, 178.
Lille	July 24–30	1		
Paris	May 21–July 31	14	2	
Gold Coast	Mar. 1–May 31	33	7	
Great Britain:				
England and Wales	May 22–Aug. 20			Cases, 2,591.
Birmingham	Aug. 14–20	1		
Bradford	May 29–June 11	2		
Cardiff	June 19–July 2	4		
Leeds	July 17–Aug. 27	10		
Liverpool	July 17–30	1		
London	May 15–June 18	2		
Newcastle upon Tyne	June 12–Aug. 13	5		
Sheffield	June 12–Aug. 6	25		
Stoke-on-Trent	Aug. 21–27	1		
Scotland—				
Dundee	May 29–July 2	5		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 25 to September 23, 1927—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Greece	June 1-30	14		
Saloniki	July 12-18		1	
Guatemala:				
Guatemala City	June 1-30		9	
Guinea (French)	June 4-10	9		
India	Apr. 17-July 16			Cases, 63,349; deaths, 16,595.
Bombay	May 28-July 23	199	131	
Calcutta	May 8-Aug. 6	374	286	
Karachi	May 15-Aug. 6	10	5	
Madras	May 22-Aug. 13	22	6	
Rangoon	May 8-July 30	169	52	
India, French Settlements in	Mar. 20-June 18	174	111	
Indo-China (French)	Mar. 21-July 20			Cases, 314.
Saigon	May 14-20	1	1	
Iraq:				
Baghdad	Apr. 10-16	2		
Basra	Apr. 10-July 16	2	1	
Italy	Apr. 10-May 21	13		
Rome	June 13-19	1		
Jamaica	[illegible] Aug. 27	30		Reported as alastrim.
Japan	Apr. 3-May 7			Cases, 19.
Nagasaki City	June 20-Aug. 14	26	7	
Taiwan Island	May 21-31	1		
Java:				
Batavia	May 22-July 23	3		
East Java and Madura	Apr. 24-July 9	12		
Latvia	Apr. 1-30	1		
Mexico	Mar. 1-31			Deaths, 162.
Durango	June 1-30		1	
La Oroya	Apr. 1-June 30			Present.
Monterey	July 1-31	6	4	
San Luis Potosi	May 29-Aug. 13		11	
Tampico	June 1-July 31	1	2	
Torreon	Aug. 7-13		1	
Morocco	Apr. 1-June 30	154		
Netherlands India:				
Borneo—				
Holoe Soengei	Apr. 21			Epidemic in two localities.
Pasir Residency	Apr. 30-May 6			Epidemic outbreak.
Samarinda Residency	May 21-27			Do.
Nigeria	Mar. 1-May 31	2,077	513	
Paraguay:				
Asuncion	July 10-23		2	
Persia:				
Teheran	Feb. 21-May 22		8	
Poland	Apr. 10-July 9	17	2	
Portugal:				
Lisbon	May 29-Aug. 6	17	1	
Senegal:				
Medina	July 4-10	7		
Siam	Apr. 1-July 23			Cases, 168; deaths, 40.
Bangkok	May 1-July 23	13	7	
Spain:				
Valencia	May 29-June 4	2		
Straits Settlements	June 12-18			Cases, 3.
Singapore	Apr. 1-June 18	7	2	
Sumatra:				
Medan	June 5-11	2		
Switzerland:				
Berne	June 26-July 2	1		
Tunisia	Apr. 1-June 10			Cases, 10.
Tunis	June 1-10	1		
Union of South Africa:				
Cape Province	July 17-23			Outbreaks.
Elliott district	May 11-June 10			Do.
Idutywa district	July 3-9			Do.
Kalanga district	May 11-June 10			Do.
Transvaal—				
Barberton district	May 1-7			Do.
Venezuela:				
Maracaibo	July 12-18		1	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 25 to September 23, 1927—Continued

TYPHUS FEVER

Place	Date	Cases	Deaths	Remarks
Algeria	Apr. 21–July 20			Cases, 399; deaths, 39.
Algiers	May 11–July 31	25		
Oran	May 21–Aug. 10	33		
Bulgaria	Mar. 1–June 20			Cases, 206; deaths, 18.
Sofia	June 4–Aug. 5	2		
Chile:				
Antofagasta	Apr. 16–May 31	1		
Concepcion	May 29–June 4		1	
La Calera	Apr. 16–May 31	1		
Ligua	Mar. 16–31	2		
Puerto Montt	Apr. 16–May 31	1		
Santiago	do	5	1	
Talcahuano	July 10–16		1	
Valparaiso	Apr. 16–Aug. 6	4	1	
China:				
Manchuria—				
Harbin	July 25–31	3		
Mukden	May 29–June 4	1		
Tientsin	July 10–16	1		
Chosen	Feb. 1–May 31			Cases, 512; deaths, 42.
Chemulpo	May 1–June 30	15	1	
Gensan	do	2		
Seoul	Apr. 1–June 30	30	2	
Czechoslovakia	do			Cases, 49.
Egypt	May 28–July 29			Cases, 120; deaths, 18.
Alexandria	May 21–Aug. 5	13	5	
Cairo	Jan. 15–Apr. 22	30	8	
Estonia	Apr. 1–June 30			Cases, 5.
Greece	June 1–30	2		
Athens	do		9	
Iraq:				
Baghdad	Apr. 24–30	1		
Irish Free State:				
Cork County	July 3–9	1		In urban district.
Latvia	Apr. 1–June 30	26		
Lithuania	Feb. 1–June 30	303	37	
Mexico	Feb. 2–Mar. 31			Deaths, 88.
Mexico City	May 29–Aug. 7	40		Including municipalities in Federal district.
San Luis Potosi	July 31–Aug. 6		1	
Morocco	Apr. 1–July 10	815		
Palestine	May 24–Aug. 8			Cases, 16.
Haifa	do	6		
Jaffa	Aug. 2–15	2		
Jerusalem	June 28–Aug. 15	3		
Mahneim	May 17–23	1		In Safad district.
Nazareth	July 19–25	1		
Safad	May 17–Aug. 8	10		
Peru:				
Arequipa	Apr. 1–30		1	
Poland	Apr. 10–July 9	1,009	92	
Portugal:				
Lisbon	May 29–June 4	1		
Oporto	Aug. 20–27	1		
Rumania	Apr. 3–June 25	923	61	
Spain:				
Seville	Aug. 19–25		2	
Tunisia	Apr. 22–July 20			Cases, 158.
Tunis	July 5–Aug. 21	2		
Turkey:				
Constantinople	May 13–19		2	
Union of South Africa	Apr. 1–30			Cases, 55; deaths, 8, native. In Europeans, cases, 2.
Cape Province	Apr. 1–July 23	42	5	Outbreaks.
Albany district	June 5–11			Do.
East London	May 22–28	1		Do.
Glen Gray district	May 1–7			Do.
Kentani district	June 26–July 2			Do.
Qumbu district	May 1–7			Do.
Umzimkulu district	June 26–July 2			Do.
Natal	Apr. 1–July 9	7	3	
Impendhle district	June 5–11			Do.
Orange Free State	Apr. 1–July 23	5		
Transvaal	Apr. 1–30	1		
Johannesburg	July 3–16	18	5	
Yugoslavia	May 1–July 31			Cases, 15; deaths, 4.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 25 to September 23, 1927—Continued

YELLOW FEVER

Place	Date	Cases	Deaths	Remarks
Ashanti:				
Obuasi	Aug. 6	1	1	
Dahomey (West Africa):				
Porto Novo	July 1	1	1	In Syrian woman.
Gold Coast	Apr. 1-May 31	45	20	
Do	Aug. 4	2		
Ivory Coast	July 29	1	1	
Liberia:				
Monrovia	May 29-July 8	4	5	
Senegal	May 27-July 31			Cases, 5; deaths, 2.
Dakar	July 9	1		
Do	Aug. 8	2	2	
Khombole	Aug. 1-14	3		
M'Bour	May 27-June 19	5	5	
Ouakam	June 2-Aug. 14	4	2	
St. Louis	Aug. 1-14	2	2	
Thies	July 10	1	1	In European.
Tivaouane	May 27-June 8	5	5	
Togoland:				
Meiatza	Aug. 15-21	1	1	